

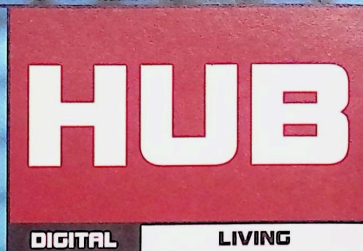
Shadowrun: the world's first cross-platform shooter

March 2007

Volume 20 Number 03

Free

Core 2 Duo Speed Tests



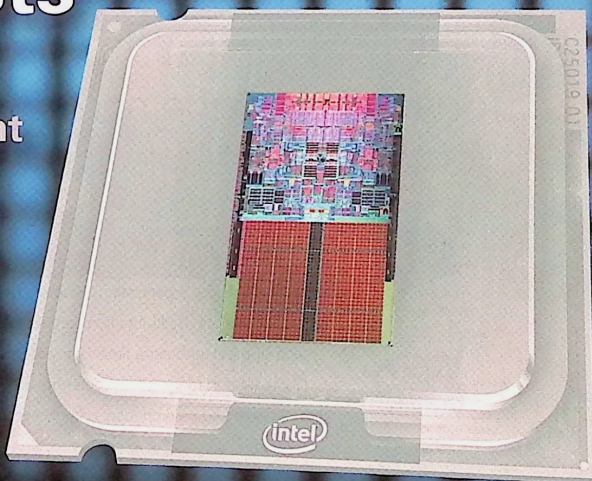
**Faster, Cooler,
More Energy Efficient**

All About Flickr

Another Canadian
phenomenon goes south

Blu-ray vs. HD-DVD

Let the battle begin



Plus...

Sony Ericsson Cyber-shot
K790: cellphone, camera
or both?

Panasonic
in Paris

www.hubcanada.com



Today: submit the annual business report.
Tomorrow: a whole day of rock climbing.



HL-2070N



MFC-665CW



MFC-5860DN



MFC-9420CN

For your professional accomplishments, you can always depend on the reliability of Brother imaging products to respond to your needs and those of your organization. Brother creates a line-up of printers, fax machines and multi-function centres that provide you with peace-of-mind, and extra time...for your personal pursuits.

Our extended range of monochrome and colour imaging products, for personal and network use, can give you the speed and versatility you need.

Our low acquisition, energy consumption and consumable costs, coupled with a nationwide network of authorized customer-care centres and machine lifetime, toll-free technical support will not only improve your lines of communication, but also your bottom line.

So whether your professional life takes you around the globe or around the corner, you can always count on Brother imaging and communication products to give you the best out of every day and every dollar.

For more information, call 1-877-BROTHER or visit us at brother.ca

PRINT

FAX

SCAN

COPY

NETWORK



Take
It
Personally.

Actual Size
2.32" x 3.35" x 0.74"

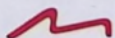


Mio DigiWalker™ H610

Personal GPS Navigator
and Digital Entertainment Player

The Mio DigiWalker™ H610 is a truly *personal* GPS navigator and media player - *personal* because it's about the size of a cell phone; *personal* because it has separate navigation modes for walking, biking and driving; and *personal* because it lets you enjoy hundreds of your movies, photos and tunes as it helps find your destination. So, pick up an H610 from a retailer near you and *Take It Personally*, wherever you go.

It's where you're going.



H610



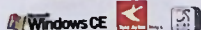
C310s



C710



P550



Office DEPOT

www.mio-tech.com

Mio DigiWalker™ C310s, C710, H610 and P550 are trademarks of Mio Technology USA. All other marks are the property of their respective owners.

"Way Cool!"
"Beautiful!"
"Great Gaming Laptop!"



G1

Listen to these recent comments made by current ASUS G1 owners. Then it becomes clear why the G1 is beloved by its users. The G1 is not only engineered in every detail for extreme gamers, but also delivers top performance that computer professionals need. One glance and you know that no other notebook will do.

ASUS' G1, powered by Intel® Centrino Duo Mobile Technology features Intel® Core™2 Duo T7200 and NVIDIA® GeForce® Go 7700 512 MB graphics that rip through today's most cutting-edge games and applications. Exclusive features further distinguish the G1 notebook from others.

- Onboard OLED Display
- Built-in high-resolution Webcam
- Flashing Sidelights
- Gaming Hotkey Highlights

For more details, visit <http://ca.asus.com/hub1>



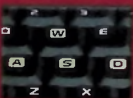
Onboard OLED Display



1.3 Megapixel Webcam



ASUS Direct Flash



Gaming Hotkeys

Pacific Notebooks
1-905-305-6833
www.pacificnotebooks.com

Canada Computers
1-416-733-4481
www.canadacomputers.com

Milestone Computer
1-905-307-7738
www.MilestonePC.com

MicroBytes
1-877-MICROBYTES
www.microbytes.com

Infonoc
1-888-418-9338
www.infonoc.com

PC Cyber
1-613-224-9995
www.pccyber.com

PC Village
1-905-889-5488
www.pcvonline.com

Anitec
1-888-264-6329
www.anitec.ca

NCIX
1-888-NCIX-888
www.ncix.com

G1-AK024C - powered by Intel® Centrino Duo Mobile Technology featuring Intel® Core™2 Duo processor T7200, NVIDIA® GeForce Go 7700 512 MB, 2 GB DDR2 667 MHz, 15.4" WSXGA+ 1680x1050 glossy widescreen, 160 GB hard drive, Dual-Layer DVD+RW/DVD-RW Super-Multi Drive with Lightscribe, built-in 1.3 Megapixel webcam, 10/100/1000 LAN, Bluetooth V2.0+EDR, Wireless 802.11a/b/g matching gaming bag and mouse, 2-year global warranty and 30-day Zero Bright Dot LCD

MSRP \$2,239

Pricing and availability is subject to change without notice.

© Copyright 2007 ASUS Computer International. All Rights Reserved. ASUS is a registered trademark of ASUSTek Computer International. Centrino, Centrino Logo, Core Inside, Intel, Intel Logo, Intel Core, Intel Inside, and Intel Inside Logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

ASUS
Rock Solid · Heart Touching

Editorial



Thanks for the memory
I've had memory on my mind for the past few months. Maybe it's all the memory-related products I've been exposed to. Like when the Sony Ericsson folks sent over a new camera phone to test, they included a one-gigabyte Memory Stick

Micro card. The M2 card, as it's also called, is about the same size as a fingernail. That's quite wee, but the microSD card in my BB Pearl is even smaller – and available in capacities of up to two gigabytes.

I tested a handheld GPS system from Pharos on a recent trip to Europe, and the company sent along a two gigabyte SD memory card (postage stamp dimensions) with the Windows CE-powered GPS unit. On the card was the company's complete map sets for Canada and the US – and there was still room to load a subset of European maps as well. I also picked up a 2GB SD card for a pittance at a local retail shop and loaded it with 500 MP3s and used the music player on the GPS unit to help pass the dozen-plus hours in transit.

The SD format is poised to match the capacity of CompactFlash, which is currently the most common memory card format for digital SLR cameras and has led the other formats in capacity and speed. But cameras like the Nikon D80 and Panasonic DML L1, which have only an SD/SDHC card slot, signal the beginning of a change. Panasonic has 16 GB SDHC cards on its product road map, which means they'll be showing up in stores this year. Toshiba announced an 8GB SDHC card in November.

SDHC (for high capacity) is a new spec based on the SD Card Association's SDA 2.0 specification for cards with capacities above 2 GB. One of the features of SDHC is that it standardizes performance into speed class ratings. Presently there are three: cards bearing the Class 2 rating must be able to write data at two megabytes per second

or better; Class 4 cards write at least 4 MB/sec and Class 6 cards 6MB/sec.

In contrast, CompactFlash is full of wishy-washy branding like Extreme III and Platinum II that don't give much of a clue about the card's speed. Given that these cards are aimed at the performance segment of the digicam market, you'd think performance numbers would be front and centre – like 0-100 km/hr figures for sports cars. The speed class rating of the SDHC cards is at least a step in the right direction.

However, one of the growing pains of moving to SDHC is obsolescence of older SD devices. Both SD and SDHC cards can be used in an SDHC-compliant device, but SDHC cards won't work with older SD devices. In other words, when you pick up one of those 1G GB SDHC cards and insert it into the SD card slot of your PDA or digicam, it'll fit, but don't expect it to work unless the device is new enough to be SDHC compliant. And in case you were wondering, the two previously mentioned SLRs, the Nikon D80 and Panasonic DML L1, both are SDHC-ready.

Developers will certainly continue to build bigger memory cards in all formats, but what would you do with a 1G GB memory card in your camera, PDA or cell phone?

Even in the bulky RAW camera format, digital image files are rarely more than 15 megabytes per image, which means you could store more than 1,000 images on such a card. If camera resolution were to magically double overnight, you'd still be able to get 500 shots on the card. Sounds like a lot, but many photographers shoot that much during a single outing, so it's not overcapacity by any means, not today and certainly not next year.

Big capacity in other devices makes sense too. Since PDAs and cell phones are taking on more functionality and media-rich content is on the rise, more storage will always be a good thing. For example, Bell Canada Mobility announced its pay-per-view cell phone movie download service, and with all those tunes you also want to store, suddenly that 1GB memory card doesn't seem so huge.

Enjoy the issue. David Tanaka, Editor-in-Chief

Contents

March 2007

In selected regions and online:

Night photography	4
The Flickr phenomenon	6
Panasonic rolls out 11 new digicams	10
Life on a stick	12

The Core 2 of the Matter	16
Blu-Ray versus HD-DVD	24
Under the platter	28
Online video communities	34
...and more	

HUB

DIGITAL

LIVING

Volume 20 : Number 03

Editorial

Editor-in-Chief David Tanaka
tanaka.david@gmail.com

Managing Editor

Jennifer Kavour
jennifer@publishing.ca

Contributing Editors

Sean Carruthers
Gord Goble
Mike Palermo
Leo Rickwood
Marc Saltzman
Chad Sapieha
Gene Wilburn

Advertising Sales

Sales Manager Ralph Ventriglia
ralph@publishing.ca

National Account Executive Maria Favot
maria@publishing.ca

Ad Sales

ONTARIO/TORONTO Ralph Ventriglia
ralph@publishing.ca

MONTREAL Brian Hillcoat
brian@publishing.ca

WESTERN CANADA Vivian Jin
vivian@publishing.ca

Business Group

President/Publisher Scott Piccolo
scott@publishing.ca

Art Director Steven Stoner
stevens@publishing.ca

Production Manager Christie Swall
christie@publishing.ca

Production Assistant Liz Van Der Wee
liz@publishing.ca

Distribution Manager Mark Backer
mark@publishing.ca

Office Administrator Malenie Rajaram
malenie@publishing.ca

IT Manager Steve Quinney
steveq@publishing.ca

Piccolo Publishing Inc. (Head Office)

775-B The Queensway, Toronto, ON, M8Z 1N1
Tel: 416-348-9666 Toll-free: 866-757-0179
Fax: 416-348-9553

Canadian Publication Mail
Sales Product Agreement #41037518. Printed in Canada.
ISSN 1210-0143 HUB: Digital Living (B.C. ed.)
ISSN 1210-0151 HUB: Digital Living (Calgary ed.)
ISSN 1210-016X HUB: Digital Living (Edmonton ed.)
ISSN 1210-0178 HUB: Digital Living (Eastern ed.)
ISSN 1210-0186 HUB: Digital Living (Montreal ed.)
ISSN 1210-0194 HUB: Digital Living (Prairie ed.)
ISSN 1210-0208 HUB: Digital Living (SW Ont. ed.)
ISSN 1210-0216 HUB: Digital Living (Toronto ed.)
HUB: Digital Living is published monthly by Piccolo Publishing Inc. All rights reserved. Reproduction in whole or in part without the permission of the publisher is strictly prohibited. Information presented here is compiled from sources believed to be accurate, however, the publisher assumes no responsibility for errors or omissions. The publisher reserves the right to refuse ads. The opinions expressed in the articles and columns and ads are those of the writer/advertiser and not necessarily those of HUB: Digital Living.

SLACO COMPUTER

King George Hwy
137 St
Office Depot
Super Store

Celeron 3.2/3.3GHz	\$489/504
Pentium4 3.2/3.4GHz	\$529/559
Pentium4 Dual-core 2.8G	\$569
Pentium4 Dual-core 3.4G	\$659

Foxconn 865G7MF-S Motherboard
(S-775, i865G, 800MHz FSB, S-ATA, RAID)
256MB PC3200 DDR RAM
80GB S-ATA 8M Cache Hard drive
All-in-1 Memory Card Reader
Intel Extreme Graphic2 Video O/B
Open AGP 8x Video Card Slot
Sony AWQ170A 18xDVD+RW D.L.
5.1 Channel 3D Sound Card O/B
BenQ P010 PS/2 Keyboard
Logitech Optical Wheel mouse
17" P4-ATX USB2.0-Front Case
10/100MB Ethernet O/B
Speakers w/Headphone Jack
17" LG 1718S LCD Panel 8ms 700:1

SOLERIA-2255

Celeron 3.2/3.3GHz	\$559/575
Pentium4 3.2/3.4GHz	\$589/629
Pentium4 Dual-core 2.8G	\$629
Pentium4 Dual-core 3.4G	\$719

Asus P5RD2-VM Motherboard
(S775, SATA, RAID, Dual-channel DDR2)
512MB PC4200 DDR2 RAM
164GB S-ATA 8M cache hard drive
All-in-1 Memory Card Reader
ATI X300 PCI-E video upto 128M O/B
Open PCI-E X16 video card slot
Sony AWQ170A 18xDVD+RW D.L.
6-Channel 5.1 Sound Card O/B
BenQ P010 PS/2 Keyboard
Logitech Optical Wheel mouse
17" P4-ATX USB2.0-Front Case
10/100/1000MB Ethernet O/B
Speakers w/Headphone Jack
17" LG 1718S LCD Panel 8ms 700:1

SOLERIA-4255

Pentium-4 3.2/3.4G	\$769/799
P4 Dual-core 2.8/3.4G	\$799/889
Core 2 Duo E6300/6400	\$909/959
Core 2 Duo E6600/6700	\$1059/1289

ECS 945P-7 Motherboard
(i945P, SATA, Dual-channel DDR2)
1.0G PC5400 DDR2 RAM
250GB S-ATA2 Hard Drive
All-in-1 Memory Card Reader
GF7300GS PCI-E 256M/TV-out/DVI
Sony AWQ170A 18xDVD+RW D.L.
8-Channel 7.1 Sound Card O/B
BenQ P010 PS/2 Keyboard
Logitech Optical Wheel mouse
17" P4-ATX USB2.0-Front Case
10/100/1000MB Ethernet O/B
OG-1015 Speakers w/ Subwoofer
19" LG L194WXTX Wide Screen LCD
(5ms, 2000:1, Dual Analog/Digital)

SOLERIA-6255

P4 Dual-core 2.8/3.4G	\$1059/1149
Core 2 Duo E6300/6400	\$1179/1219
Core 2 Duo E6600/6700	\$1329/1559
Core 2 Quad Q6600/4x2.4G	\$2089

Asus P5LD2 Motherboard
(Intel i945, SATA, RAID, Dual-channel)
OCZ 2G PC5400 DDR2 dual-channel kit
320GB 16MB S-ATA2 Hard Drive
All-in-1 Memory Card Reader
GF7600GT PCI-E 256M/TV-out/DVI
Sony AWQ170A 18xDVD+RW D.L.
8-Channel 7.1 Sound Card O/B
Logitech premium desktop keyboard
Logitech Wireless Optical Mouse
17" P4-ATX USB2.0-Front Case
10/100/1000MB Ethernet O/B
Edifier M1500 6pc 5.1 Speaker
19" LG L194WXTX Wide Screen LCD
(5ms, 2000:1, Dual Analog/Digital)

SOLERIA-8255

NOTEBOOK/DESKTOP

Asus W7J-3P116G Core 2 Duo	25500/1.0G/120G/13.3" WXGA/DVD-RW/802.11g, nVidia 7400TC	\$1739
Acer TM2480-2735 Celeron-M	1.46G/512M/80G/14.1" WXGA/56K LAN/802.11g/DVD-RW/Vista Home	\$819
Acer AS9300-3699 AMD Tuning	2.0G/512M/120G/17" WXGA/56K LAN/802.11g/DVD-RW/Vista Home	\$799
Acer AS5630-8368 Core 2 Duo	1.6G, 120G, 15.4" WXGA DVD-RW, 56K LAN, 802.11g, Vista-Premium	1029
Acer AS 5610-4877 Core Solo	1.86G, 1.0G, 15.4", 80G DVD-RW, 56K LAN, 802.11a/b/g, Vista-Premium	829
Fujitsu A6014 Core Duo	1.6G/1.0G/120G/15.4" WXGA/DVD-CRW/56K LAN/802.11g/XP-MCE	1249
LG P1-2255AS Core 2 Duo	1.6G/512M/80G/15.4" WXGA/DVD-CRW/56K LAN/802.11b/g/XP-Pro	1099
LG P1-AQ049 Core 2 Duo	1.83G/100G/1.0G/15.4" WXGA/DVD-RW/56K LAN/802.11b/g/1394/XP-Peo	1559
Toshiba PSAB1C-GM80XE Core Duo	1.66G/512M/100G/DVDRW/15.4" TFT/56K LAN/ WLAN/XP-Pro	1079
PC2700-3200 DDR 512M/1.0G	\$69/129 Bluetooth adaptor/USB IRDA Bridge	2519
PC4200 DDR2 200pin 512M/1.0G	\$69/129 External USB 1.44 Floppy Drive	29
144Pin SDRAM 128/256/512M	36/55/105 2.5" Hard Drive 40/80/120G	64/94/9109.9
Encore wireless LAN 54Mb USB/PCMCIA	35/35 2.5" S-ATA Hard Drive 80G	89

CASE/OTHER

Windows XP Home/Pro/MCE	\$105/149/135
Windows Vista Home Basic/Premium	118/148
Windows Vista Business/Ultimate	175/244
MS Office 2007 Student & Teacher Edition	179
MS Office 2007 Basic/SBE/Pro	208/289/369
MS Office 2003 Professional	299
Windows SBS 2003 Server w/5CAL	489
Win2003 Server Standard w/5CAL	759
MS Optical Mouse/Internet Keyboard	13/18
MS Keyboard Multimedia/Natural	22
MS Ergonomic Value Pack Keyboard+Mouse	59
MS Internet Keyboard+Optical Mouse	29
MS Wireless Comfort KB+Optical Mouse	54

ADAPTER/CABLE

USB 2.0 PCI Adapter 5 Ports	\$19.9
Enhanced PCI Printer Port Adapter 1/2 Port	25/29
IEEE 1394 (Firewire) PCI Adapter 4 ports	24.9
IEEE 1394 (Firewire) PCI Adapter w/Cable	32.9
PCI Serial Adapter 2 port w/16C550 UART	24.9
Removable Hard Drive Rack IDE/S-ATA	14.9/19.9
2.5" Notebook HD to 3.5" HD IDE Adapter	11.9
USB Radio Recording support MP3 & WMA	14.9
USB Fan & Light 2-in-1	4.99
USB 2.0 Gold-Plated Printer Cable retail box	9.99
USB 2.0 Cable Printer/Extension	7.77
USB to Parallel Printer Port Cable Adapter	19.99
Monitor Extension Cable Shield 6'0"/17.5"	12/15/19
DVI Cable For Digital Monitor 6'0"/17.5"	15/22/29
9 Pin Serial Cable F/F Straight/Cross	13/13
USB 2.0 to IDE (3.5" & 2.5") Adaptor	25
USB 2.0 to S-ATA+IDE (3.5" & 2.5") Adaptor	35
S-Video Cable 6Ft	6.9
40 Pin Round IDE Data Cable	3/5
Parallel Port Printer Cable	7
Serial ATA (SATA) Power Cable	3
3 KVM 3-in-1 6" Cable	9.9
KVM Switch manual 2 Port/4 Port w/cable	19/22
Digital KVM Switch HotKey w/cable 2/4port	39/79
EUSSO UKS8204-DO 4 port USB KVM Switch	129
EUSSO UKS8104-RO 4 port KVM Stackable	139
USB Printer connect to Parallel port adapter	29
ST Lab S-ATA PCI Adapter w/RAID support	29

UPGRADE SPECIAL \$119

Free Installation

ECS 761GX-M754 MB w/AMD Sempron64 3000+ CPU
10/100MB LAN/S-ATA/RAID/6-Channel 3D Audio
Upto 128MB PCI-E video (Open PCI-E Video card slot)

MONTHLY SPECIAL

ECS NFORCE 570 SLIT-A Mainboard	\$105
OCZ PN2-SLI2+ nForce 680iSLI M.B.	\$99
ECS P4D-610G DDR2 dual-channel kit	269.9
kingston 512M USB2.0 Flash Drive	8.99
HP LaserJet 1080 laser Printer 1200dpi	89.9
Antec Senata2 case 450w ultra quiet	105.9
Evga GF6200 AGP video 128M, DVI, TV, 4.99	
Sony AWQ170A 18XDVDR+RW Software	36.9
Acer Apacer AU231 MP3 Player 1.0G	34.99
(1.0G built-in w/LCD & SD/MMC Expansion Slot)	
LG 17" L1718S LCD Panel 8ms 700:1	184.9
LG 20.1" L204WXTX Wide Screen LCD	299.9
(1680x1050dpi, Dual Analog & Digital, 5ms, 2000:1)	

CPU/MEMORY

Sempron AM2 3000/3400/3500+	\$65.9/92.9/114.9
Athlon64 AM2 3200/3500/3800	96.9/109.9/119
AMD Athlon64X2 AM2 3800/4200/4600	139.9/189.9/234.9
AMD Athlon64X2 AM2 5000/5200	259.9/279
Celeron-S775 3.0G/3.2G/3.3G	68/75/84
Pentium-4 S775 3.0G/3.2G/3.4G	95.9/99.9/124.9
Pentium D core duo 820(2.8G)/945(3.4G)	119.9/209.9
Core 2 Duo E6300(1.86G)/E6400(2.13G)	228.9/269.9
Core 2 Duo E6600(2.4G)/E6700(2.66G)	374.9/599.9
Core 2 Quad Q6600/QX6700	1099.9/1229
PC-133 SDRAM 128/256/512M	29.9/39.9/59.9
PC-133 SDRAM 16 chips 128/256M	32.9/44.9
DDR PC2000 256/512M/1.0G	26.9/45.9/89.9
DDR2 PC4200 256/512M/1.0G	26.9/39.9/79.9
OCZ DDR PC3200 1G(2x512M) Dual Channel kit	109.9
OCZ DDR PC3200 2G(2x1.0G) Dual-channel kit	209.9
OCZ DDR2-667mhz PC5400 1G dual-channel kit	99.9
OCZ DDR2-667mhz PC5400 2G dual-channel kit	189.9
OCZ PC6400 2.0G Gold edition Dual Channel kit	239
Kingston PC3200 256/512M/1.0G	32.9/56.9/105
Kingston PC4200 DDR2-533MHz 512M/1G	48.9/98.9
ASB20 Flash Drive 512M/1G/2G/4G	9.99/19.9/34.9/76
Apacer P31 Player 1G w/SD expansion slot	34.99
Apacer Au222 1.0G MP3 Player w/Audio/FM	59.99

DIGITAL CAMERA

Canon A430/530/540/630/640	\$159/199/285/329/419
S3iSD/40/60/80/100/120/140/160	459/369/289/329/559/639
Casio EX-S600/770/270/21000	319/359/249/359
Olympus E500/E500K/E500K2	649/739/829
Sony DSCW50/DSCW100/DSCN2	279/389/409
Sony DSCN5/DSCN10/DSCN2	499/389/479
Compact Flash 512M/1G/2G/4G	19.9/24.9/34.9/54.9
Compact Flash 80x120x 512M/1G/2G	22.9/28.9/36.9
Compact Flash 120x 4.0G/8.0G	68.9/128.9
Memory stick Pro Duo 512M/1G/2G/4G	36/42.9/74.9/119
Micro-Secure Digital 512M/1G/2G/4G	22.9/29.9/64.9
Kingston 2.0G SD card & Card reader Combo kit	34.99
(works w/SD, MMC, MMCplus, miniSD, RS-MMC, MMCmobile)	
Kingston SD, MMC, MiniSD MicroSD Card Reader	9.99
(works w/SD, MMC, MMCplus, miniSD, RS-MMC)	
Secure digital 512M/1G/2G/4G	16.9/18.9/29.9/54.9
Secure digital 80x 512M/1G	19.9/22.9
Secure digital 150x 2.0/4.0G	38.9/59.9
Secure digital Mini 1.0G/2.0G	19.9/34.9
XD-Picture Card 512M/1.0G/2.0G	39.9/49.9

Phone: 604-599-8785
Fax: 604-599-8758
Tech: 604-599-8745

#1116-7318 137th St.
Surrey, BC, Canada
V3W 1A3

www.slacocomputer.com

Systems come with 3 years labor, 1 year part warranty; option of 1 month free Internet access.
All new systems are tested & burned-in for 48 hours before shipping. Financing and leasing are available.
Prices reflect a 3% cash discount and are subject to change without notice. Price effective Mar.07-Mar.31

Business Hours:

Mon-Fri. 10am-6:30pm;
Saturday 10am-6:00pm;
Sunday & Holidays Closed.

Sempron64 3000/3400+	\$489/519
AMD AM2 Athlon64 3200+	\$529
AMD Athlon64 3500/3800+	\$549/569
Athlon64x2 3800/4200+	\$569/639

Foxconn K8M890-M2MA-RS2H MB
(2000MT/s P-ATA RAID, PCI-E X16,
256MB PC4200 DDR2 RAM,
80GB S-ATA 8M Cache Hard drive
All-in-1 Memory Card Reader
VIA Chrome9 Video Card O/B
Open PCI-E x16 Video card Slot
Sony AWQ170A 18xDVD+RW D.L.
6 Channel 5.1 Sound Card O/B
BenQ P010 PS/2 Keyboard
Logitech Optical Wheel mouse
17" P4-ATX USB2.0-Front Case
10/100Mb Ethernet O/B
Speakers w/Headphone Jack
17" LG 1718S LCD Panel 8ms 700:1

SOLERIA-1255

Sempron64 3000/3400+	\$559/589
AMD AM2 Athlon64 3200+	\$589
AMD Athlon64 3500/3800+	\$609/629
Athlon64x2 3800/4200+	\$649/699

Asus M2NBP-VM CSM Mainboard
(nVidia Quadro S-ATA, Dual-channel)
512MB PC4200 DDR2 RAM
164GB S-ATA 8M cache hard drive
All-in-1 Memory Card Reader
nVidia GF6 video w/RGB/ DVI O/B
Open PCI-E x16 Video card Slot
Sony AWQ170A 18xDVD+RW D.L.
6-Channel 5.1 Sound Card O/B
BenQ P010 PS/2 Keyboard
Logitech Optical Wheel mouse
17" P4-ATX USB2.0-Front Case
10/100/1000Mb Ethernet O/B
Speakers w/Headphone Jack
17" LG 1718S LCD Panel 8ms 700:1

SOLERIA-3255

AMD Am2 Athlon64 3200+	\$769
Athlon64 3500+/3800+	\$789/809
Athlon64x2 3800/4200+	\$819/879
Athlon64x2 4600/5200+	\$919/949

MSI K9N Neo-F Am2 Mainboard
(nForce550, Dual-channel DDR2, RAID)
1.0G PC5400 DDR2 RAM
250GB S-ATA2 Hard Drive
All-in-1 Memory Card Reader
GF7300GS PCI-E 256M/TV-out/DVI
Sony AWQ170A 18xDVD+RW D.L.
8-Channel 7.1 Sound Card O/B
BenQ P010 PS/2 Keyboard
Logitech Optical Wheel mouse
17" P4-ATX USB2.0-Front Case
10/100/1000Mb Ethernet O/B
OG-1015 Speakers w/ Subwoofer
19" LG L194WTX Wide Screen LCD
(5ms, 2000:1, Dual Analog/Digital)

SOLERIA-5255

AMD Am2 Athlon64 3200+	\$1019
Athlon64 3500+/3800+	\$1039/1059
Athlon64x2 3800/4200+	\$1079/1129
Athlon64x2 4600/5200+	\$1169/1239

Asus M2N4-SLI AM2 Mainboard
(nForce4 SLI, Dual-channel, RAID, SATA)
OC2Z S2 PC5400 DDR2 dual-channel
320GB 16MB S-ATA2 Hard Drive
All-in-1 Memory Card Reader
GF7600GT PCI-E 256M/TV-out/DVI
Sony AWQ170A 18xDVD+RW D.L.
6-Channel 5.1 Sound Card O/B
Logitech premium desktop keyboard
Logitech Wireless Optical Mouse
17" P4-ATX USB2.0-Front Case
10/100/1000Mb Ethernet O/B
Edifier M1500 6pc 5.1 Speaker
19" LG L194WTX Wide Screen LCD
(5ms, 2000:1, Dual Analog/Digital)

SOLERIA-7255

MOTHERBOARD

ASUS P5SD2-X/PSPE-VM	79/79
ASUS P5L-MX/PSL2D2/PSL2-Deluxe/WF	105/135/235
ASUS P5B-VM/PSB/PSB-E	152/158/184
ASUS P5B-Deluxe/PSB-Deluxe-WF-AP	224/238
ASUS P5N-SLI/PSN32-SLI-Premium	134/254
ASUS P5N-E/SLI/PSN32-E-SLI	159/279
ASUS P5RD2-VM/PSW64-WS-Pro	99/329
ASUS P5W-DH-Deluxe/PSWDG2-Pro	264/379
ASUS Striker NF6801 SLI	379
ASUS (S754) K8U-X8VB-MX/B(1394)	69/79
ASUS (AM2) M2N-E/2M-SLI-DELUXE	122/169
ASUS (AM2) M2N2M2R32-MVP	114/179
ASUS (AM2) M2NPV-VM/M2N32-WS-Pro	115/329
ASUS M2N32-SLI-Deluxe-WF/M2N4-SLI	229/115
ASUS AM2 M2NBP-VM/CSM(corporate edition)	99.9
ASUS S939 A8N5X/A8N32-SLI-Deluxe	99/179
ECS 945G2T-M/945P-A3(0)	79/105
Foxconn K7S 741GXMG S462	69
Foxconn 760GXK6MC-RS/K8M890-M2MA	69/79
Foxconn 865G7BPC/F45P7AA-8KS2	69/105
PC Partner 915PASP7-A47 I915 chipset Firewall	79
Gigabyte GA-8195ASL-S3/8195PS-DS3	109/175
Gigabyte GA-8195PS-DO6	269
Gigabyte GA-G1975X	289
Gigabyte GA-M57SLI-S4/GAM595SLI-S5	164/229
MSI 975X Platinum V2/945P Neo3-F	219/109
MSI P965 Platform	179
MSI K9N Neo-F	99
MSI K9N-Platinum/K9N-SLI-Platinum	129/165

MONITOR

Acer LCD 17" AL1706AB/AL1717BMD	\$179/199
Acer 19" LCD AL1916AB/1916WAB	239/219
Acer 20" AL2016W/AL2223W	289/345
Acer 24" AL2416W/37" AT3720A	749/1249
Acer LCD TV 42" AT4220A 1366x768 8ms DVI	1439
Daewoo/Daytek 15" WTN1552 LCD TV monitor	299
Daytek19"19DHL LCD 1545DVI 12ms speaker	229
Daytek LCD Touch Screen 15"17"	599/769
Daytek DT-2620/D14040	629/1269
Daytek DM-424VD/2460	1579/2169
LG 17" L1718S 700:1 8ms	184.9
LG L1732TX Analog/Digital 4ms 1400:1	218
LG 17" L1752TX 1400:1 300cd/m2 8ms	199
LG 1932TX Dual Analog/Digital 4ms 1400:1	269
LG 1952TX Dual Analog/Digital 8ms 1400:1	249.9
LG L194WT W.screen 5ms 2000:1 VGA/DVI	244.9
LG L204WXT 20" 1680x1050 5ms 2000:1	299.9
LG L226WXT 22" 5ms 3000:1	389
Samsung 17" 701N LCD 600:1 8ms	189
Samsung 19" 920N 8ms 700:1	249
Samsung LCD 931C	309
Samsung LCD 940BW Analog/DVI 6ms 700:1	249
Samsung LCD 20" 205BW	339
Samsung LCD 22" 225BW	399
Sony LCD S75AB/S95AB	319/519
ViewSonic CRT G90F/G225FB	289/539
ViewSonic 17" VA703B/19" VA903B	205/245
ViewSonic LCD 19" VP920A/VC1930WM	315/289
ViewSonic LCD 19" VP930A/VP932	359/299
ViewSonic LCD VP2030B/VP2130B	535/765
ViewSonic LCD 22" VX2235WM	389
Elecom Japanese LCD Cleaning pad 50 pack	9.99

MODEM

Aopen V.92 56K PCI/Hardware voice	\$19/35
USR 56k V.90 PCI Win Modem/Voice	22/25

NETWORKING

CNet 10/100Mb Switch 5/8/16 Port	\$22/32/69
Impression 10/100Mb Ethernet Card	9
Belkin Wireless G 54Mb Router	44.9
Belkin Wireless G 54Mb PCI Ethernet Adapter	29.9
Encore Wireless LAN 54Mb USB/PCMCIA	35/35
Novatech wireless-G 54 Mb PCI Ethernet Card	24.9
D-Link 4 port Router DI-604/DI-704UP	39.9/59.9
D-Link Wireless DI-524 Router 802.11G 54Mb	58.9
D-Link Wireless DI-624 Router 108Mb	69.9
D-Link DWL-G630 54Mb PCMCIA LAN Wireless	53
D-Link wireless LAN PCI DWL-G510 54Mb	51
D-Link wireless LAN PCI DWL-G520 108Mb	63
D-Link wireless LAN PCMCIA DWL-G650 108Mb	59
D-Link 24 Port DES-1024D/1024R+ Switch	159/139
D-Link DSS-16+ 16 Port Switch	78
Linksys WRT54G 4 port wireless router	69
Linksys WRT54GR Double Range wireless router	69
Linksys WRT54GS Speed Boost wireless router	92
Linksys wireless PCI card WMP54G/WMP54GR	65/84
Linksys WMP54GS Speed Boost wireless PCI card	74
Linksys WUSB54G wireless USB card	68
Linksys WPC54G wireless PCMCIA card	65
SMC EZ6516TX-CA 16 Port Switch	119
Cable Assembly 3/6/10	4/5/6
Cable Assembly 25/50/75/100R	9/14/19/24
CAT5e Cable 50/75	9/12/15/75

PRINTER/SCANNER

Brother DCP-130C print/copy/photo centre	\$68.9
Brother 240C/440CN/3360/665CW	128/189/129/279
Canon IP1600/3300/4300/5300	34.9/99/154/199
Canon IP6700D/9900Pro/9000i/MP90	249/399/669/829
Large Format IPF500/IPF600/IPF700	1529/2349/4099
Canon MP-180/460/510/600/830	135/154/204/289/389
Canon MFC MFC-3240/4150/6530/6550	249/289/669/769
Canon Scanner 4400F/8600F/9950F	155/249/569
Epson C88/1280S/R2400	99/499/899
Epson Cds printer R220/380/800/1800	99/169/455/629
Epson 3-in-1 CX3810/4600/5000/7800	75/149/191/199
Brother Laser HL-2030/2400	89/179
Brother HL 2070N/2700CN/5250DN	199/749/329
Okidata Color Laser C7300/C5500N	319/629
Okidata DOT Matrix 168/186S/320TD	289/339/489
Samsung Laser ML1610/2100/2571N	89/135/254
Samsung Laser 3051N/3560/3561N	319/559/619
Brother Toner TN 250/350/460/560	19.9/54/54/54
Canon Toner w/Drum E40/A30/S35/FF-3	69/69/54/54
HP Toner w/Drum C7115A/C7115X/Q2612A	49/54/59
HP Toner w/Drum C92298A/C9303A/C4092A	49/49/49
Panasonic Toner FA76L/GU331/GU335	19.9/75/75
Samsung Toner w/Drum ML1610D/1210/1710D3	59
Samsung Toner Drum SF4500/SF5100/CSX4216D3	59
SamsungG Toner 510D2C/MY/3K for CLP510	79

SOFTWARE

McAfee VirusScan 2007 Plus	\$15.9
McAfee AntiVirus2007+ Software Firewall + AntiSpypware	19.9
McAfee Internet Security Suite 2007	19.9
Norton AntiVirus 2007	24.9
Norton Internet Security 2007	34.9
(Norton AntiVirus + Software Firewall + Anti-Spam+Anti-Popup)	58.9
Norton Ghost 10.0	58.9

SOUND/SPEAKER

Encore 4-Channel PCI Sound Card	\$14
Creative SB Audigy SE 7.1/Audigy 4 SE 7.1 24bit	34/53
Creative SB X-Fi Xtreme Sound	59
Creative SB X-Fi Xtreme Gamer Retail box	119
Creative SB X-Fi Fatal1ty box	218
Creative SB X-Fi Elite Pro 24bit 7.1 Retail box	318
OG-1015 w/subwoofer/Speaker	13/6
Altec Lansing VS3251 5.1 Spk. w/Wireless remote	79
Edifier 5.1 Spk M1500/R251	39
Logitech X5450/X620 6.1	75/89
Logitech Z5300 THX 315w 5.1 Wireless rear spk	279

IDE/HDD

PATA (IDE) 7200RPM Hard Drive with 2MB buffer cache:	
80G 7200 rpm Hard drive w/3 year warranty	51.9
SATA 16M 7200RPM Hard Drive with 8MB buffer cache:	
80/160/250/320/400G	52.9/67.9/84.9/106.9/148.9
ATA EIDE 7200rpm Hard Drive with 16MB buffer cache:	
320/400/500G	109.9/158.9/199.9
SATA 8M 80/160/250G	52.9/69.9/84.9
SATA 16M 250/320/400/500G	92.9/112.9/155.9/179.9
WD Raptor 10000rpm 36/74/150G	139.9/179.9/319.9
SCSI Hard Drive	call

VIDEO

Asus EN-7950GT 512M/8800GTS 640M	329/499
Asus EN78800GT 768M HDCP/TV-out/DVI	709
ATI AGPx8 128M,DVI,TV-out 9200/9250	36.9/44.9
ATI Radeon 9550 w/TV-out/DVI/256M	69.9
ATI 9600XT AGPx8 DVI,TV-out 256M	84.9
ATI X300 PCI-E/128M/TV-out/DVI/HDTV	58.9
ATI X1300 TV-out/DVI PCI-E 256/512M	84.9/115
ATI X1600Pro 256M TV-out DVI PCI-E/AGP	104.9/129.9
ATI X1600Pro PCI-E TV-out DVI 256/512M	135/149.9
ATI X1650XT PCI-E TV-out Dual DVI 256M	189
ATI X1950XTX PCI-E 256M DDR4,TV-out,DVI	319
ATI X1950Pro PCI-E 256M DDR3,TV-out,DVI	235
ATI X1950XTX PCI-E 512M,VIQO,DVI	439
eVGA AGP 6200 AGPx8 128M TV-out DVI	44.9
eVGA 7600GS 256M AGPx8 DVI TV-out	152
eVGA PCI-E 256M 7300GT/7600GS	96.9/124.9
eVGA PCI-E 7600GT 256M DDR3/TV-out/DVI	148.9
eVGA PCI-E 256M 7950GT/7950GT 512M	288/319
eVGA 7950GT 256M DDR3 PCI-E TV-out DVI	268
eVGA PCI-E 8800GTS 640M/8800GTX 768M	489/679
eVGA 8800GTS 320M DDR3 DVI TV-out	369
Forsa AGPx8 GF6200 TV-out DVI HDTV/256M	74
Forsa PCI-E GF7600GT TV-out DVI 256M DDR3	145.9
Forsa PCI-E 256M TV DVI 7300GS/7600GS	79.9/124
Gigabyte 8800GTS/8800GTX	529/279
Leadtek GF7600GS PCI-E 256M/TV-out/DVI	134
Leadtek GF7600GT PCI-E 256M DDR3 TV-out/DVI	169
Leadtek GF7950GT PCI-E 512M w/TV-out/DVI	335
Leadtek PF7950GX2 GF7950GX 1.0G PCI-E	649
Leadtek 8800GTS 640M/8800GTX 768M	499/699
MSI NX8800GTS 640M DDR3/DVI/TV-out	519
MSI NX8800GTX-TX2768 768M DDR3	709
TV Tuner w/Remote	39
Avermedia TV-PVR150+ TV tuner	99
ATI TV Wonder 200/HDTV Wonder	89/129
Leadtek TV Tuner TV2000XP Expert w/remote	79
External USB TV-Tuner	39
Diret TV Box watch TV without computer	68
Sapphire Theatrix 550 Pro TV Tuner FM/Remote	99/109

Night Photography

I had an opportunity to spend a few days in Paris at the end of January and was really looking forward to doing the tourist thing with my camera. The heavily overcast skies were disappointing for daytime shooting, but the evenings held lots of promise - it is called the "city of lights" after all. But oops, this was a business trip, so all I packed was my dSLR and one extra lens.

Okay, I broke the first rule of night photography, which is "use a tripod." Ignore this rule and life becomes hard - but not impossible, with a little ingenuity. In fact, many tourist locations don't permit tripods, so you'll have to improvise anyway.

Mini tripods (sometimes called tabletop tripods) work if your camera is not too bulky. They don't take up much room in your luggage and are discrete enough on site that the security guard may not notice. However, I find that they are not robust enough to handle a dSLR.

Beanbags work well because they cradle the camera while conforming to irregular surfaces. For example, suppose you are travelling by car and see a fleeting subject worth photographing. You can stop, put the bag on the roof and compose a shot in far less time than it takes to set up a tripod - specially if it's in the trunk under a couple of suitcases.

My "beanbag" is a lunch bag-size cloth sack filled with hard plastic craft beads that sits in the bottom of my camera bag. I also have ThePod (www.thepod.ca), a Canadian creation, which is a circular beanbag that's fitted with a threaded connector that screws into your camera's tripod socket. The original is about the same diameter as a CD and five centimetres

(two inches) thick; a smaller model is also available.

Even without the cushioning effects of a beanbag, you can use whatever's at hand to steady the camera, although you risk scratching the finish of your camera. I've rested mine on garbage bins and concrete walls, I've wedged it in an iron gate, pressed it firmly against a lamppost or tree trunk - and have got some good shots for the effort.

Technology to the rescue

In film photography, if you want to shoot in low light, you buy film that's more sensitive - what's called fast film. With digital, you don't have to because most cameras now have a feature called variable ISO, with some manufacturers, notably Fujifilm, going as high as ISO 3200 in some models. I devoted last month's column to variable ISO, but to recap within a night photography context, high ISO is not a free ride. As you amp up the signal, you also increase noise, and in digital photos, the noise shows up as miscoloured pixels that degrade the image. This is especially bothersome in night photography, because areas that should be black or nearly so look like they are raining confetti.

Noise reduction systems have improved with each generation of camera, and now, depending on the camera and the scene, images taken at ISO 800 and beyond can be quite acceptable. However, a by-product of noise reduction is a softening of image detail. Panasonic introduced a setting on some of its cameras called Intelligent ISO, and one of its features is the ability to cap sensitivity - for example, to no higher than ISO 800 - so that



you can control the amount of image degradation.

Professional photographers have had an expensive system of image stabilization in their gear to help them in low light situations, and fortunately, this technology has trickled down to even point-and-shoot designs. Panasonic, notably has Mega OIS, which is an optical stabilization system across its entire line of consumer digicams, but Canon, Nikon and others are including this on more of their models too. Optical image stabilization systems typically use a floating lens element that counteracts the small tremors and movements of your hand, which are accentuated when you use a slow shutter speed.

Another kind of mechanical image stabilization applies the principle of floating elements, not to the lens, but to the sensor. The result is similar – small hand movements and tremors are cancelled out.

Night photography can be very rewarding, often adding a special dimension to a scene that, in daylight, would be quite ordinary. Digital also encourages experimentation since you don't have to worry about paying for film development of all your failures.

By David Tanaka

e ehosting.ca

Call us at 604-738-2077

Visit us at www.ehosting.ca

Go Ahead and Celebrate

The Best Deal Ever...

Buy 1 &
Get 1 **FREE***

StartUp Plan

\$5.95

- Receive an Email plan FREE*
- Or 3 months credit*
- Up to \$23 in value FREE*

All-In-One Plan

\$9.95

- Receive a Mini Plan FREE*
- Or 3 months credit*
- Up to \$47 in value FREE*

Absolute Plan

\$49.95

- Receive a StartUp Plan FREE*
- Or 1 month credit*
- Free iPod Shuffle
- Up to \$150 in value FREE*

Offer ends March 31, 2007

* Offer valid only on new hosting activations with a min. 24 months signup contract. The giveaway plans will only be free for 12 months and require activation before using. Domains for both plans have to be purchased. The 3 months credit (or 1 month for Absolute Plan) requires mail-in rebate. Rebate form has to be submitted before May 3, 2007. Please visit our website at www.ehosting.ca for details.

The Flickr Phenomenon

A gaming project that led to a photo website

If you ask someone, "Do you flickr?" chances are they'll understand perfectly that you just asked, "Do you have a membership on Flickr, the amazing photo sharing site?" Flickr has become so popular that its name is often used as a verb.

With a current membership that exceeds six million and with 324 million photos posted on the site, Flickr has become, in just three years, the primary Internet photo-sharing site for many photographers.

What is it about Flickr that has made flickr'ing a way of life for so many? Although there's no single aspect of the site that attracts new users like a magnet and keeps regulars from returning for more, much of Flickr's phenomenal success may be attributed to its unusual origin.



flickr

The best way to store, search,
sort and share your photos.

Sign up!

Or, learn more.

You wear a costume identifying you as, if not quite divine, someone special. — Irving R. Kaufman

Find a photo of...

GO

Or, browse popular tags?

Explore Flickr

Browse interesting photos
shared over the last 7
days.

See popular cameras with Camera
finder



For many photographers, Flickr has become "the" photo site in terms of community involvement

Ludicorp, the Vancouver-based company that launched Flickr in 2004, started with the goal of creating a web-based massively multiplayer game called Game Neverending. During the development of the game, the company discovered that its software was uniquely well suited to photo hosting and Game Neverending was shelved.

The interactivity and communal aspects of the gaming environment carried forward into the development of Flickr, creating the atmosphere for participation and involvement that characterizes the Flickr experience. Flickr was an immediate success. For many photographers, Flickr has become "the" photo site in terms of community involvement. To this day, Flickr still offers free (though slightly limited) accounts in addition to its paid Pro accounts, making it easy to try the Flickr experience at no cost.

On May 16, 2006, Ludicorp and Flickr were acquired by Yahoo! Inc and all content was migrated from servers in Canada to servers in the United States. The upload limits on free accounts were increased to 100MB a month (from 20MB) and caps were removed from Pro accounts.

Organizationally, Flickr is straightforward. Photos posted to an account go to the user's photostream, a kind of LIFO (last in, first out) stack with the

most recent post always on top. The Photostream itself cannot be reorganized - that is done with sets (called galleries by other sites). Sets can be arranged in any sequence. An online tool called Organizer makes organizing sets easy, using drag-and-drop thumbnails.

Permissions are placed on images making them viewable to everyone, to friends, to family or to no one. Photos with no Flickr viewing permissions can be linked to other websites. Copyright statements can be applied to all images. Many photographers on Flickr use Creative Commons licensing on images, allowing their images to be used for non-commercial purposes.

Tags, or user-assigned keywords, represent one of the more powerful organizing features of Flickr. They allow other users to quickly search the millions of images for items of interest. The tags feature also makes it easy

Already a member? Sign in.

to locate images that have a Creative Commons license, which permits the images to be used for non-commercial uses such as reports, school assignments or computer wall paper.

Flickr provides special interest forums, called groups. Any member can create a public or private group and each group includes a photo posting area and discussion area.

With a few simple clicks, you can add your photos to any group you've joined, or multiple groups, whether it's a camera-specific group such as Nikon, Canon or Pentax cameras, or broadband groups such as B&W, macro, portraits, landscapes, pets, babies or trees.

There are thousands of groups - some fun, some bizarre. There are groups for existential photographs, photos of coffee, photos with the colour red and photos cropped as squares. Many regional groups have formed as photo-sharing and meetup groups, and Canadian cities are represented from Victoria to St. John. These groups frequently generate local events for shooting, dining and meeting other members in person.

Other useful Flickr features are RSS and Atom feeds and the ability to post to blogsites directly from within Flickr - ideal for anyone maintaining a photo blog.

With its discussion groups, lists of contacts and the ability to comment on other people's photos easily, Flickr is one of the most community-oriented photo-sharing sites on the Web. There's a sense of anticipation as you load the site to see what your friends have posted, what's being talked about in the groups and reading comments on your own postings.

For photographers wanting to share photos and experiences with other photographers, Flickr has become home base, the first stop of the day on the Internet after the weather page, and often the last stop before bedtime.

By Gene Wilburn

Gene Wilburn is a writer/photographer based in Port Credit, Ontario. His Flickr photostream is located at www.flickr.com/photos/cdnphoto.

www.phase-1.com

Phase 1 SYSTEMS



"We offer a wide range
of open box iPods and Nanos.
Great Selection and amazing prices.
Call us today as they go fast!"

LCD Blowout!

Best Price In Canada!

Acer 42 Inch
\$1489



iPod Accessories
Available Too!



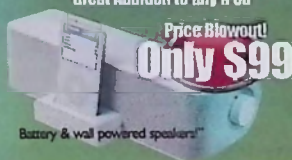
Acer 5630 Notebook
\$1589

Acer 5630-6891
Intel 2.0GHz Core 2 Duo
2GB 667 DDR2 Ram
160GB SATA Drive
7300 Nvidia 128mb Video
Windows Media Center XP
Free Vista Upgrade!
15.4" Crystal Bright Screen
Dual Layer DVD R/W

22" Acer LCD
\$349!



iPod Editor Sound Station!
Great Addition to any iPod



Phoenix System
\$1449

Asus P5N-SLI Motherboard
Intel Core 2 Duo 2.13 E6400
EVGA 7600GT 256MB PCI-E Video
1GB Kingston DDR2 667 Ram
250GB Western Digital SATA Drive
LG H22N 18X DVD R/W
Antec Sonata II Silent Case
Microsoft Multimedia Keyboard
Microsoft Optical Wheel Mouse
Windows VISTA Premium
Acer 19" 1916WA LCD Monitor

BBB
MEMBER
Since 1982

18

Years Strong!

- On-Site Service • Data Recovery • All Repairs
- Virus Removal • Installations • Upgrades

Why us? Because with our head technician's 25 years experience leading our team, we can offer you fast, accurate and professional service. 15 years with the BBB and no complaints, our record speaks for itself! **Our work is guaranteed.** Whether you come see us or we come see you, you will see what real service and support is all about!

For more information, email us at: info@phase-1.com

410 Willingdon Ave
Burnaby, BC, V5C 5G4

Monday to Friday 9:30am - 6:30pm
Saturdays: 10:00am - 5:00pm

Phone: 604.291.1558
Fax: 604.298.5126



All Prices Reflect
2.5% Cash Discount

DV Or Not DV

Comparing and uploading online video

time, this column addressed jerky video. The term was used to describe technical issues affecting mobile video and online playback specifically, but included some critical commentary of the state of online video content. Setting aside for a moment creative or aesthetic issues and critiques, let's look at some technical standards that must be met in order to get material online. Most user-generated content sites have specific technical requirements for video submissions, covering specifications like file size, frame rate and frame size.

For example, most YouTube videos are less than five minutes long, and a 100 MB file size limit. Depending on your Internet connection speed, it may take one to five minutes to upload each megabyte of video. A 100 MB video could take as long as 500 minutes, or more than eight hours, to upload! Google Video accepts AVI, MOV, MPG and the popular Real and Windows Media formats (but, at press time, not Flash). Files over 100 MB can be accommodated. A frame rate above 12 fps and a data rate greater than 260 Kbps is recommended, but videos cannot have a data rate higher than 5 Mbps, which keeps them well below DVD-quality. Google will take full-sized video (640 x 480) in the standard 4:3 screen ratio – but no one seems to be accepting 16:9 widescreen video just yet.

Canada's Epress.ca prefers a smaller, less bandwidth intensive file: 100 to 200 Kbps, with a screen size of 240 x 180. Its criteria for the content is even more stringent – videos must be "watchable" (among other criteria). Google, on the other hand, will take anything not obscene or copyright-protected – and still give it the full screen, high bandwidth treatment.

Most of what is found on popular sites like YouTube or MySpace is actually video taken with a cell phone, although more demanding, more creative types are using other video tools to create online content. It's not impossible to use a brand new, top-of-the-line HD camcorder to create Web video, but it may be a bit of a kill. The specs for online video just don't come close to matching those of high definition video, so you will most likely want to – you will probably have to – edit, compress and otherwise process your original high quality video material for online distribution.

Bandwidth (or the amount of data communications capacity available for transmitting video online) is always increasing, and video compression techniques are always improving, so tips for reducing the size of an Internet video may seem superfluous. However, there are good reasons to ensure your video is as good as possible:

- **Start with the best video possible** (Poorly shot, poorly lit, noisy or shaky video takes more resources to compress, deliver and play back well.)
- **Lower the frame rate** (Video is normally 30 frames per second; 15 frames per second can be a reasonable Internet option.)
- **Crop the frame size** (Standard video is normally 640 x 480 pixels; 320 x 240 is quarter-screen; cell phone video is even smaller, for example, 176 x 144.)
- **Reduce the bitrate** (Most Web surfers have high-speed connections, but dial-up is not extinct. Bitrates from less than 100 Kbps to over 5 Mbps can be encountered on the Web – significantly less with a cell phone – so adjust your video expectations accordingly.)

Most popular video editing and image manipulation software programs allow you to do all of this and more, often using simple wizards or one-click menu selections.

To watch mobile TV, you must have a video-capable phone, of course. But a paid subscription to a mobile TV plan, and your presence in an approved coverage area, are also necessary. Monthly fees for mobile TV services vary by the provider, with pay per view and monthly subscription plans available. Expect to pay \$15-\$20 a month for a typical service subscription; video-equipped handsets can run from around \$150 to \$300+, again depending on plan, provider and service package.

Mobile TV service providers have their own plans, pricing and processes for watching video. Sometimes, it's a 10-step procedure just to get a mobile TV viewer downloaded to a compatible phone. Once that's done, there can be another multi-step process to actually watch a video!

Mobile media, Internet distribution and social networking are truly revolutionizing the way media is created and consumed, even if many productions could be considered creatively lame or technically unsuitable.

Technically, advances in mobile video technology will continue to bring enhanced quality and capability to the market, such as new DVB-H solutions with H.264 video and AAC+ audio, the mobile equivalents of high definition video and uncompressed audio.

Soon, too, new interactive features will come to mobile TV services, including Interactive Advertising, Mobile Commerce, Content Rating, Community Building and even Online Voting capabilities.

Creatively – well, let's just hope the "jerkiness" is solved before the voting kicks in!

By Lee Rickwood

Digital Video Recorder (DVR) Boards Commercial Grade



- 4 Channel DVR Board **\$475**
- 8 Channel DVR Board **\$699**
- 16 Channel DVR Board **\$1399**

- Hardware Compression with H.264 Codec (lower requirements on PC)
- Up to 64 Cameras per DVR (4 X 16 Channel DVR Boards)
- Up to 704 X 480 Display & Recording Resolution MAX
- Up to 30 FPS (or 60 FPS) Display & Recording for Each Channel
- Smart Search (or Target Search)
- Instant Playback (without Entering Playback Mode)
- Multi Window IE and Client Software Internet Playback & Recording
- USB Hard Drive Direct Back up
- Free Software and Upgrading Service

Visit Our Online Demo - <http://216.232.70.19>

Watermark CCTV

The Leader in Digital Surveillance Systems
170-2268 No.5 Road,
Richmond, BC, V6X 2T1
Tel. 604 279 1969
Fax. 604 279 1967
Email: info@watermark.com
www.watermark.com

New Korea Cameras
Day/Night
High Resolution

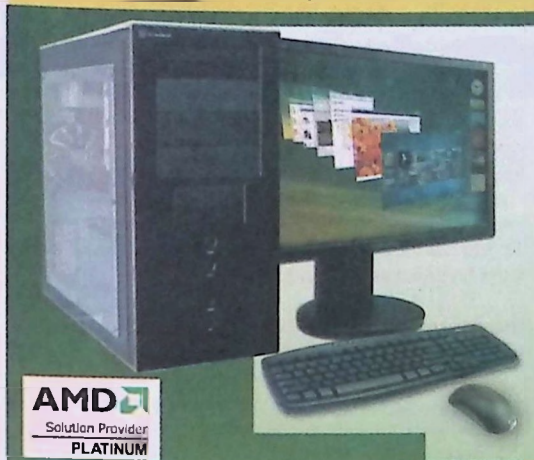
Super Low Lights
540 TV Lines 0.05 Lux @ F1.2
Call today for prices

**Full Solutions Provided
Resellers Welcome!**



Break the Speed Barrier.

Free* gift card on selected AMD & ATI system!



Break the Speed barrier with the
AMD Athlon™ 64 X2 Dual Core
processor. The most exciting game
experience available!

System Detonator

- AMD Athlon™ 64 X2 5200+ with dual-core
processing (2.6GHz, 2MB L2 Cache)
- Radeon™ X1950 XT 512MB video card
(2x1GB) PC2-6400 800MHz DDR2 memory
- 320GB 7200RPM hard drive
- Samsung 18x dual layer DVD burner
- Microsoft Black Keyboard & Wheel Mouse
- Windows Vista™ Ultimate Edition
- Microsoft Works & Entertainment Suite 2006

CALL!



*Advertised prices reflect default configuration only.
System shown includes optional upgrades. Monitor not included.

WE ARE OPEN ONLINE 24/7. Buy It online, pick it up In-store. It's that convenient!

 HDCP Ready! \$319 Samsung 20-inch 6ms widescreen LCD 2068W Savings Code 18705-3018	 Back Lit Keys! \$79 Logitech G15 Gaming Keyboard Savings Code 16370-1018	 2000DPI \$64 Logitech G5 Optical Mouse Savings Code 35784-1018	 5.1 speakers \$68 Logitech X-530 Speaker Set Savings Code 17899-1018
--	---	---	---

NCIXPC™ recommends Windows Vista™

 Starting at \$954*	 Starting at \$1219*	 Starting at \$2009*
Extra Bronze - Good Performance & Value <ul style="list-style-type: none"> • AMD® Athlon™ 64 3500+ AM2 64-bit processor (2.2GHz, 512KB L2 Cache) • Radeon™ X1650 Pro 256MB video card • 1GB PC2-5300 (2 x 512MB) DDR2 memory • 250GB 7200RPM hard drive • Samsung 18x dual layer DVD burner • Logitech Keyboard and Microsoft optical mouse • Windows Vista™ Home Premium Edition <p>*Default configuration shown.</p> <p>Get a free \$25 Gift Card (In-store sales only)**</p>	Extra Silver - Value SLI Gaming <ul style="list-style-type: none"> • AMD® Athlon™ 64 X2 4200+ AM2 64-bit processor (2.2GHz, 2x512KB L2 Cache) • Radeon™ X1650 XT 256MB video card • 1GB PC2-5300 (2 x 512MB) DDR2 memory • 320GB 7200RPM Serial ATA2 hard drive • Samsung 18x dual layer DVD burner • Microsoft black keyboard & mouse set • Windows Vista™ Home Premium Edition <p>*Default configuration shown.</p> <p>Get a free \$50 Gift Card (In-store sales only)**</p>	Extra Gold Crossfire - Ultimate gaming <ul style="list-style-type: none"> • AMD® Athlon™ 64 X2 4600+ AM2 64-bit processor (2.4GHz, 2x512KB L2 Cache) • Radeon™ X1900XTX 512MB video card • 2GB (x2GB) PC2-5300 DDR2 memory • 320GB 7200RPM hard drive • Samsung 18x dual layer DVD burner • Microsoft black keyboard & mouse set • Windows Vista™ Ultimate Edition <p>*Default configuration shown.</p> <p>Get a free \$50 Gift Card (In-store sales only)**</p>

NCIX.com

BURNABY:	5068-B Kingsway	PH: 604.451.8682
LANGLEY:	#104-20125 64th Avenue	PH: 604.514.5700
RICHMOND:	#1063-8300 Capstan Way	PH: 604.233.0308
VANCOUVER:	1843 West Broadway	PH: 604.739.9985

Panasonic rolls out 11 new digicams

PARIS - It's hard to find a city more photogenic than Paris, and it was no coincidence that Panasonic chose this city for the worldwide launch of its 2007 digital camera lineup. The company invited photo and tech magazines from around the world, among them HUB:DL, to attend a briefing called the Lumix Global Seminar here at the end of January. On the walkway - 11 new camera models to refresh the company's point-and-shoot stable from top to bottom, plus a couple of personal printers and an HD photo player.

Panasonic entered the digital camera market only in 2002 with four models, but by 2006 managed to capture about 10 percent of the digital camera market in Europe, said Panasonic Europe's marketing director T. Miyata during the briefing. The company's goal is to have a 15 percent market share globally by 2009.

Though something of a newcomer to digital cameras, Panasonic brings a broad range of core technologies to the table. Thus, many of the essential components that go into the company's Lumix brand are home grown or developed with strong partners. With Leica, it develops lenses. It has a partnership with Toshiba to develop LCDs. The image processing engine and CCD imager are from other divisions within Panasonic. It makes its own batteries as well as SD memory cards.

Intelligent blur reduction

Pulling this bag of technologies into a product doesn't necessarily mean success, but Panasonic has managed to match a few innovations that have hit the mark. For example, the company found that image blurring from camera shake was a common error, so it developed an optical image stabilization system, which it brands as Mega O.I.S. This is now a feature across the entire line - even the entry level \$200 LS70 has it.

The 2007 models have a second form of blur reduction that the company calls Intelligent ISO control. Most digital cameras offer variable ISO, but Panasonic harnesses it specifically to address the blurring from fast moving subjects. The relationship is simple: higher ISO allows use of a faster shutter speed, which is better able to stop the action of a moving subject. One of the consequences of high ISO settings is increased digital noise, so in the Intelligent ISO settings is the ability to cap the max. ISO that can be used.

Together, the Mega O.I.S optical image stabilization and the Intelligent ISO control form what Panasonic calls Intelligent Image Stabilization. Intelligent because the camera figures out the source of the blurriness - camera shake or a fast moving subject - and applies the appropriate remedy. This is being

implemented across the entire 2007 point and shoot line.

Wide wide angle, long tele

A typical 3x zoom gives wide angle performance of a modest 35 mm [or that equivalent in the more familiar 35mm camera terms]. Even 6x or 10x zooms tend to maximize the telephoto rather than the wide angle end of things. In polling purchasers of the company's early 28 mm offering, the FX07, Panasonic found that the wide angle feature was the number-one reason they bought that model. Six of the 2007 models have 28 mm wide angles.

Likewise, some Lumix models distinguished themselves early on with long telephoto lenses. In the 2007 lineup are a very tidy 7.2 megapixel TZ3 with a 10x lens (28-280 mm equiv.) and the SLR-style FZ8 (also 7.2 megapixels) with a 12x zoom (36-432 equiv.).

Shooting session

Panasonic handed us a couple of pre-production samples - the TZ3 and FZ8 - and arranged tours to various attractions around the city, inviting us to shoot copiously but cautioning us that these were pre-production units so the image processing engine was not in final tune.

Panasonic describes the TZ3 as the "travel-friendly" model, and I can see why. I immediately liked this camera, and would put it (or one like it) high on my short list of cameras to take with me if I wanted to play tourist. The 28 mm wide angle is a significant and very noticeable step up from the typical 35 mm wide angle on point and shoots. It was especially nice to have that extra wide angle coverage when shooting the cavernous interiors in places like the Palais Versailles. But this one has a 10x zoom, so the telephoto reach of a 280 mm lens is not too shabby either. I didn't like the placement of the main control and was constantly backing out of some menu item I'd inadvertently accessed with my thumb.

The look of the FZ8 inspires a more serious approach. It's a very well proportioned design and from a photo it's hard to figure out its size - it is actually smaller than it looks. The 12x zoom with a 432mm telephoto is its killer feature, and if that's not enough, both wide and tele adapters will be available to extend the range to 25 mm wide and 700+ telephoto. At 430 mm, to handhold is to live dangerously, so optical image stabilization can really show some benefits here. I used the camera to take some night shots and the images were quite crisp - that image stabilization system seems to have been a real aid.

By David Tanaka

ADD WINGS
to your regular Dialup
Now you can fly five times faster

5X Unlimited Dialup for **\$9.50** /mo
Sign Up Now www.qlink.ca Tel: 604-288-1082

Q Link





anitec.ca

One Step Ahead

Home Office

**\$769.95**

ACT Proma - PA 200

- AMD Athlon™64 X2 3800+ (2.0 GHz)
- 1GB Dual-Channel DDR2-667 Memory
- 320GB 7,200rpm SATA II Hard Drive
- 18x Dual/Double-Layer DVD±Writer
- nVidia® GeForce® 6100 Graphics
- 5.1 Channel Audio Controller
- 10/100/1000Mbps Network Adapter
- InWin Mini Tower Case
- Microsoft® Windows® Vista® Home Premium

Gaming

**\$1,199.95**

ACT Performa - GI 100

- Intel® Core™ 2 Duo E6400 (2.13 GHz)
- Asus® P5B Motherboard
- G.Skill 1GB DDR2-800 Dual-Channel Memory
- Seagate 320GB 7,200rpm SATA II Hard Drive
- LG 18x Dual/Double-Layer DVD±Writer
- Sapphire Radeon™ X1950 Pro 256MB
- Antec® LifeStyle SOLO Quiet Mid-Tower Case
- Enermax Liberty 400W Power Supply
- Microsoft® Windows® Vista® Home Premium

The Basics

**\$259.95**

ACT Vanta - VA 100

- AMD Sempron™ 3000+
- 512MB PC-3200 DDR-400 Memory
- 80GB 7,200rpm Hard Drive
- 18x Dual/Double-Layer DVD±Writer
- SiS® Ultra256 2D/3D Graphics
- 5.1-Channel Integrated Audio
- 10/100Mbps Network Adapter
- *Operating System Software Sold Separate

LCD MONITOR SPECIALS

Acer AL1706Ab (Black)
17" LCD

- 8ms, 1280x1024 500:1 Contrast
- SVGA Input

\$185.95

Reg. \$199.95

Acer AL1916WAb (Black)
19" WideScreen LCD

- 5ms, 1440x900, 700:1 Contrast
- SVGA Input

\$219.95

Reg. \$229.95

Acer AL2416Wd (Silver)
24" WideScreen LCD

- 6ms, 1920x1200, 1000:1 Contrast
- DVI & SVGA Inputs

\$799.95

Reg. \$929.95

Samsung SyncMaster 931BW
(Glossy Black) 19" WideScreen LCD

- 2ms, 1440x900, 2000:1 Dyn. Contrast
- DVI & SVGA Inputs

\$279.95

Reg. \$329.95

Samsung SyncMaster 225BW
(Black) 22" WideScreen LCD

- 5ms, 1680x1050, 700:1 Contrast
- DVI & SVGA Input

\$459.95

Reg. \$489.95

ViewSonic VA1703wb (Black)
17" WideScreen LCD

- 8ms, 1440x900, 500:1 Contrast
- SVGA Input

\$199.95

Reg. \$209.95

ViewSonic VG2230wm (Black)
22" WideScreen LCD

- 5ms, 1680x1050, 700:1 Contrast
- DVI & SVGA Inputs, Height-Adjust

\$395.95

Reg. \$409.95

ViewSonic VX2245wm (Black)
22" WideScreen LCD w/iPod Dock

- 5ms, 1680x1050, 700:1 Contrast
- DVI & SVGA Inputs, Speakers w/Sub
- 8-in-1 Card Reader, USB Hub

\$489.95

Reg. \$499.95

Asus S6F Pink

**\$2,299.95**

- Intel® Centrino™ Duo L2400 (1.66 GHz)
- 1GB DDR2-533 Memory
- 120GB Hard Drive, Super-Multi DVD-Writer
- 11.1" WXGA ColorShine LCD, Intel 945G VGA
- Gigabit LAN, Wireless 802.11 a/b/g
- Pink Leather Chassis with Matching Mouse
- Microsoft® Windows® XP Professional

Acer Aspire 5630

**\$1,295.95**

- Intel® Centrino™ Duo T5200 (1.6 GHz)
- 2GB DDR2-533 Memory
- 160GB Hard Drive, Super-Multi DVD-Writer
- 15.4" WXGA (1280 x 800) CrystalBrite LCD
- nVidia GeForce Go 7300 128MB
- 8-in-1 Card Reader, OrbiCam 1.3MP Webcam
- Microsoft® Windows® Vista® Home Premium

MONTHLY SPECIALS

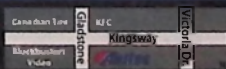
Asus STRIKER EXTREME
nVidia 680i MotherboardSKU #7599 >> **\$399.95**VKMobile Quad Band Unlocked
Ultra Compact GSM Cell PhoneSKU #7982 >> **\$99.95**G.Skill F2-6400CL5D-2GBNQ
2GB DDR2-800 Memory KitSKU #6973 >> **\$259.95**G.Skill F2-6400CL6D-4GBMQ
4GB DDR2-800 Memory KitSKU #7978 >> **\$499.95**Maxell Plus Series 8x DVD-R
Shiny Silver (50-Disc Spindle)SKU #7563 >> **\$22.95**eVGA e-GeForce 8800 GTS
SuperClocked 320MB PCI-ESKU #8174 >> **\$389.95**RiTech RJ-800PDF 7" Digital
LCD Photo FrameSKU #8147 >> **\$109.95**Enermax Galaxy DDX 1000W
Modular Power SupplySKU #7327 >> **\$339.95**Linksys WRT54GX2 Wireless-G
Router w/SRX200 TechnologySKU #5503 >> **\$49.95**Antec LifeStyle Sontat II
Black Quiet Mid-Tower CaseSKU #3821 >> **\$109.95**Shop Online @ www.anitec.ca Open 24/7

Store Hours: 10.00 am to 6.00 pm Monday to Saturday (Closed on Sunday's and Holidays)

We accept VISA, MasterCard, Online Bank Transfer, Bank Draft and Money Order.

Pictures, prices, specifications, descriptions and availability subject to change without prior notice. Please refer to our web site for current pricing. All logos, trademarks and copyrights are property of their respective owners.

2185 Kingsway
Vancouver, BC, V5N 2T4
Tel: 1.888.ANITEC.9
E-mail: sales@anitec.ca



Life on a stick

USB flash drives grow up

The first USB flash drives didn't have much capacity, but the prospect of being able to carry data on such a small device made them instantly attractive. Today, one-to-four gigabyte drives are common with 10+ GB drives coming on-stream. Having so much capacity at hand opens up new possibilities for portability. But it's not just about having all your data in your pocket. Ironically, it's re-opened a quest — one that dates back to the PC's infancy — for application portability as well. It's about putting your entire computing life on a data stick.

Memorex TravelDrive




Apps to go

Carrying your data with you on a flash drive is fine, but what if you want to open or work on a file? This is the simple reason why most of us schlep around notebook computers. The idea behind portable applications is that you can carry both the data and the application that created it on a flash drive. Publicly accessible computers in Internet cafes, libraries and other locations complete the equation. Sit yourself down with your favourite low-fat, no-fat beverage, pop in the USB drive and you can replicate your working environment on any public PC.

If you buy a USB flash drive today, it may carry a little U3 logo, along with the moniker "U3 smart drive." I'm currently testing a 4GB Memorex TravelDrive, which is U3-enabled. The TravelDrive, like other U3 smart drives, has a special flash drive controller and U3 system software called the Launchpad pre-installed into a read-only partition that the computer sees as a CD. The Launchpad resembles the Windows Start panel and serves a similar function: to launch special U3 applications and utilities.

The list of U3-enabled applications is growing. Shipping on the Memorex unit are a file synchronization program called Migo and the open-source mail client, Thunderbird. However, if you click on the "download applications" icon that appears in the Launchpad, you are taken to a U3 software site where many other open source, free and commercial titles are available in portable U3



Our 18th Year!!

INTERTECH

A Distribution Inc.

Member of
Barrie Group Canada

Member of the
Better Business Bureau

tel: (604) **872-7337** fax: (604) **872-2524**

4317 Fraser St. Vancouver, B.C. V5V 4G4
Mon-Fri 10:30 am-5:00 pm • Sat 10:00 am-4:00 pm

www.intertechpc.com

Data recovery available

Intel Core 2 Duo Starter System

- Intel 64bit Core 2 Duo CPU
- 160G HDisk (upgrade to 250G +\$25)
- Windows VISTA Home
- 1G DDR-2 667MHz Ram
- 1.44 Floppy, Front USB Ports
- Intel Express Graphics
- AC97 3D Sound, 160W Spkrs
- Logitech Keyboard, Opt Mouse
- DVD Burner 18x Dual Layer
- 10/100mb/s Network Card
- ASUS P5G2-MX Board

E4300 1.80G 800FSB	\$749
E6300 1.86G 1066FSB	\$769
E6400 2.13G 1066FSB	\$819
E6600 2.40G 1066FSB	\$919

AMD64 AM2 Mainstream System

- AMD 64bit CPU
- 160G Hard Disk (upgrade to 250G +\$25)
- Windows VISTA Home
- 1G DDR-2 667MHz Ram
- 1.44 Floppy, Front USB Ports
- GeForce 6100 Cache PCix
- AC97 3D Sound, Stereo Spkrs
- Logitech Keyboard, Opt Mouse
- DVD Burner 18x Dual Layer
- 10/100mb/s Network Card
- ASUS M2N-MX Board

AMD64x2 3800	\$699
AMD64x2 4200	\$739
AMD64x2 4600	\$779
AMD64x2 5200	\$829

Loaded Intel Core 2 Duo, 160GB, 250G

- Windows VISTA Home
- 250G SATA-2 HDisk 7200rpm (upgrade to 320G +\$30)
- 18x Dual Layer DVD Burner
- GeForce NX7600GS 256meg PCI Express
- 2G DDR-2 667MHz Dual Channel
- Logitech Multimedia Keyboard, Optical Mouse
- Black Tower w/450W Dual Fan, Extra Cooling
- ASUS P5N-SLI Board for P4-775 CPU
- ASUS M2N4-SLI for AMD64-AM2 CPU
- Floppy Drive, 10/1000mb/s Network Card
- Built-in 6 Channel Sound, Spkrs w/Subwfr

(Monitor optional)

Upgrade Options:

- Windows VISTA Home Premium \$48
- Windows VISTA Business Upgrade \$88
- Windows VISTA Ultimate Upgrade \$148
- Upgrade 7600GS to 7950GT/KO SuperClock..... \$188
- Upgrade to 2G DDR-2 667MHz \$108

- 17" Flat Panel LCD Monitor from \$199
- 19" Flat Panel LCD Monitor from \$239
- 22" Flat Panel LCD Monitor from \$359
- Microsoft Office 2007 Basic \$159
- Web Cam \$26

Intel Core 2 Duo	AMD 64x2 Dual Core		
E6300	\$1129	3800x2	\$999
E6400	\$1179	4200x2	\$1059
E6600	\$1289	4600x2	\$1109
E6700	\$1539	5200x2	\$1159

Visit our website for other packages

2 Yrs Parts & Labour Warranty

Custom Configuration Available

* Prices Subject to Change without Notice • Cash Price Only, Credit Card Users + 2% • Loans available from 12 to 65 Months • All brand & trademarks are property of respective manufacturers

versions. Like a shareware site, these are organized according to software category so it is easy to navigate and find applications like Skype or Winamp.

U3 is a proprietary system. You, as a user, can't install it on an ordinary flash drive; you need to buy a U3-enabled flash drive. However, there are alternatives to U3. One that I have been using for a couple of months is simply called the PortableApps Suite from PortableApps.com. This one is freely downloadable and doesn't need any special hardware enablement like U3 does, so it will work on any USB flash drive. The suite comes with a broad selection of applications, including portable versions of Firefox, Thunderbird, OpenOffice, ClamWin antivirus and a few others. Plus, there is a list of other applications you can add including a portable version of Gimp image editor, a media player and even something called Mac-on-a-Stick, which allows you to run a Mac Classic OS from a USB drive.

U3 and the PortableApps Suite aren't compatible with Mac. However, the Free Open Source Software Mac User Group (FreeSMUG) offers a similar suite of open source portable applications for Mac OS X.

Microsoft and other major commercial titles are conspicuously absent from the list of portable apps, but if you can live without them, you could carry your entire computing environment on a USB drive – at least that's the theory. How does it work in practice? Before the last trade show I attended, I bought a one gigabyte USB drive and loaded it with the PortableApps Suite, then ported my Thunderbird mail store from my desktop PC to Thunderbird Portable. Every time I went to the media room, I sat at a different computer, but by plugging in the USB key, I had access to my main mailbox and all the stories I was currently working on. The typical

pressroom PC comes with MS Office, but had this not been the case, the portable version of OpenOffice on the USB drive gave me a full-featured productivity suite. Had I chosen to, I also could have moved my Firefox bookmarks into the portable version.

In short, it worked well – pretty much seamlessly except for some redundant folders added by Thunderbird Portable that I can't get rid of, and some minor message duplication when I synced the two mailboxes. The suite plus my mailbox took about half the drive's capacity, leaving around 500 megabytes free for data files – more than enough for the work I wanted



Route1 MOBIKEY

ICL **www.icicomputer.com**
 #1005 - 8580 Alexandra Rd. Richmond, BC (Venezia Place) V6X 4B3 Mon-Sat: 10A-6P Sun: Closed
TEL: 604-273-1368 FAX: 604-278-5268 Email: icl@icicomputer.com

Intel Dual-Core Work Horse
 Asus P5VDC-MX (775) Motherboard
 1G DDR2 667MHz RAM
 160GB SATA 7200rpm HDD
 VIA 128MB Graphics / FDD
 10x Dual-Layer DVD-RW
 Internet Keyboard & Optical Mouse
 6-Channel Surround
 10/100 Ethernet NIC
 3 Speaker/ subwoofer

PD-LOGGERS \$518
3.0G/925 +\$70
3.4G/945 +\$130

Intel Core 2 Duo Dream Machine
 Asus P5L-MX (945/1066FSB) Motherboard
 2G DDR2 667MHz Dual-Channel RAM
 Radeon X1800Pro 512MB GDDR3 PCI-Ex Video
 250GB SATA HDD + FDD
 10x Dual-Layer DVD-RW
 Logitech Keyboard & Optical Mouse
 Intel Gigabit LAN
 6-Ch High Definition Audio/ 3-Speaker/ Sbwfr

E6600/4GB \$978
E6400/2.13G +\$50
E6600/2.4G +\$160

Warranty: All ICL systems come with 3-year service & 1-year parts limited depot warranty.
 Vista Home/ Prem/ Bus/Ulti +\$110/ 136/ 178/ 238 • Office 2007 Basic/SBE/Pro +\$208/ 278/ 368

LCD Panel/LCD TV		Monitor Price	
Acer AL1706 17" LCD	\$188	1G/2G/4G/8G	\$20/30/50/120
Acer AL1916W 19" (wide) LCD	\$245	1G/2G/4G	\$20/30/38
Acer 1916AB 19" LCD	\$245	Mini 1G/2G	\$25/38
Acer AL2016W 20" (wide) LCD	\$278	Standard Recovery Stick (Print)	
Acer AL2223VD 22" (wide) LCD	\$348	1G/2G/4G	\$48/75/118
Acer AT3705 37" (1920x1080)	\$1678	External USB HDD	
Viewsonic VG2201 22" LCD	\$298	2.5" 40/80/120G	\$78/108/148
Viewsonic VX2035WM 20" LCD	\$348	3.5" 80/160/250G	\$78/98/118
Viewsonic VG2230WM 22" LCD	\$398		
Viewsonic VX2235WM 22" LCD	\$438		

FUJITSU 2% Discount on Shipment

T4255A (15.1" Tablet) \$2228
 • C2D-1.83G/1G/80G/Vista/BT

A550DA (14.1" Note) \$1066
 • Duo-1.6G/1G/120G/DVDRW/BT

M642D (17" Note) \$1626
 • C2D-1.66G/1G/160G/DVDRW/RX1600

P7610 (15.1" Tablet) \$2068
 • Core-1.2G/512M/60G/BT/FingerPrint

F722D (15.1" Vista-Pre) \$2138
 • Core-1.2G/1G/60G/DVDRW/BT

S710DA (15.1" Note) \$1668
 • C2D-1.66G/512M/80G/DVDRW/BT
 (Prices are after Mail-in-Rebate * \$125)

ASUS 2 Year Global Warranty

Asus P5N (7" Tablet) \$999
 • CM-900M/768M/60G/GPS-Map/BT

W520 (15.1" Vista-Pre) \$1698
 • C2D-1.65G/1G/100G/DVDRW/BT

Asus P5N (7" Tablet) \$999
 • C2D-2.0G/1G/120G/DVDRW/BT

W7J (15.1" Vista-Pre) \$1748
 • C2D-1.65G/1G/100G/DVDRW/BT

Asus P5N (7" Tablet) \$999
 • C2D-2.0G/1G/120G/GF7700 512M

Asus P5N (7" Tablet) \$999
 • C2D-1.66G/1G/80G/DVDRW/Vista

G1 (15.4" Vista-Pre) \$2168
 • C2D-2.0G/2G/160G/GF7700 512M

G2P (15.1" Vista-Pre) \$2288
 • C2D-2.0G/2G/160G/RX1700 512M

F52P (15.4" Vista-Pre) \$1838
 • C2D-2.0G/1G/120G/RX1700 256M

V1P (15.4" Vista-Pre) \$2278
 • C2D-2.0G/1G/120G/RX1700/BT

W2PB (17" Vista-Pre) \$2628
 • C2D-2.0G/1G/120G/DVDRW/RX1700

We Specialize in:

- Network Support
- Data Recovery
- Virus/Spyware Removal
- Server & Networking
- VPN & Security
- On-Site Service

acer. Notebook

CM-1.46G/512M/80G/DVDRW \$698
AS557D (15.1" Vista) \$718
Core-1.86G/512M/80G/DVDRW/TVO
AS557D (15.4" Vista-Pre) \$798
Core-1.86G/1G/80G/DVDRW
AS557D (15.4" Vista-Pre) \$898
CD-1.6G/1G/160G/DVDRW
AS557D (15.4" Vista-Pre) \$998
CD-1.6G/2G/80G/DVDRW
AS557D (15.4" Vista-Pre) \$998
CD-2.0G/1G/120G/DVDRW/Cam
AS557D (15.4" Vista-Pre) \$1268
CD-2.0G/2G/160G/DVDRW/Cam
AS557D (15.4" Vista-Pre) \$1478
CD-2.0G/2G/120G/DVDRW/Cam
AS557D (15.4" Vista-Pre) \$2668
CD-2.0G/2G/240G/HD-RW

to carry with me. I will be taking the Memorex drive with me on the next few trips, but I expect the U3 experience will be very similar. Plus, the drive's greater capacity will leave me with more than three gigabytes of capacity rattling around in my pocket.

Is this just a silly diversion? Maybe not. According to an IDG News Service report, at the beginning of the next school year about 175,000 high school students in Paris will be getting USB keys loaded with a number of open-source applications such as Firefox web browser, Thunderbird mail client and OpenOffice productivity suite. Most of what they need for academic life – files as well as the applications to work on them – will be on the key, allowing them to do homework anywhere. A side benefit is that the freely available applications will reduce the incidence of software piracy.

Has anyone seen that little key thing?

Of course, one of the big issues with small, high capacity memory devices is that they are easy to lose or misplace. One of the nightmare scenarios for IT people surely must be the prospect of some distracted VP leaving a USB key filled with company data in an airport lounge or coffee bar.

One of the features of the U3 smart drive architecture is to password protect the data portion of the drive. This provides some measure of data protection, but there has been some criticism that the password system is more easily defeated than if it involved some level of encryption. However, there are a number of encryption and data security tools available for U3, so if your work requires high security, you can lock away the data.

Another peril with using public PCs is that often sensitive or private files will inadvertently be left on the host, and accessible to the next person that uses the machine. U3 applications are designed to be self-cleaning; in other words, once the USB key is removed from the host computer, nothing in the way of data, surfing history, application settings etc. remains on the host. But it is important to properly eject the drive, not just pull it out of the slot.

USB keys are small in size and big in capacity, meaning that they can also be used to steal data. Safend (www.safend.com) suggests that with the proliferation of USB drives and other devices with huge memory capacity, the potential for "data leakage" has never been higher. For example, if you are sitting in a coffee bar with your notebook and leave for a few moments to use the bathroom, there is a window of opportunity for someone to plug in a USB key and download a bunch of files using data slurping software. Safend states that some slurping software can copy the

contents of a typical MyDocuments folder in under a minute. It could also happen right in your own office if you leave your work computer unattended. (Safend says half of these so-called "data incidents" happen within an organization.)

For individuals, Safend's solution is a free (for now) software program called Safend Personal Protector that password protects your USB, Firewire and PC Card ports. Only the devices you authorize are allowed to connect.

Return of the dongle

For some users, portable applications just don't cut it. They need direct connection to their desktop machines. Secure remote access services like GoToMyPC and I'm in Touch have been around for a few years, but a relatively new variation that comes from Toronto-based Route1 Inc. (www.route1.com) uses a two-part system for secure access to your main computer from any remote PC.

The first component is the security "cloud" called MobiNet, a subscription-based [\$449/year] secure delivery platform over which you remotely access your computer. The basic MobiNet service allows up to five computers to have the MobiHost software loaded, turning them into remotely accessible hosts.

The second component is the MobiKey, a USB memory card that acts as a security dongle. The MobiKey has an embedded smart card, which authenticates the user's password and then permits access to MobiNet. Mobinet manages what services and what host computers the keyholder is authorized to access.

By David Tanaka



Memorex TravelDrive

RunGPS.com introducing GPS Navigation Products

OST-R2
BT-Q818 32-Channels
Bluetooth GPS Receiver with
32-Hours Navigation Time

- Car / Marine Navigation
- Compatible to PDA / Laptop / Cell phone with Bluetooth connection

(Mini Size: 72x46.5x20 mm) **\$84.90**

HOLUX
GPSIM-236

Wintec \$104.90
Super mini size • Bluetooth GPS Receiver • Mini size

CF GPS Receiver \$82.90
PS/2 or USB GPS Receiver
CR-213 \$62.90

Intelligent GPS Navigation Software - iGuidance V.3 for N. America/ Europe
(Includes both Laptop & Pocket PC Version)

- Dynamic Reroute
- Turn-by-Turn Directions
- Voice & Visual Guidance
- Geo-Features 2D/3D Views
- Detour and Stopover Options

N. America: \$114.90
Europe: \$159

Car Holder starting from \$22.90 for PDA, Cell Phone, PSP, MP3, GPS Navigation

GPS Accessories:
Holux AR-10 GPS Signal Radiator \$49.90
External Antenna MCX \$24.90/MMCX \$23.90
PDA to GPS Cable & Car Charger \$19.50

LCD Screen Protector Film

- Protects LCD Surface from Water, Dirt, Dust, Scratch & Graze
- from 7.2" to 20" (Widescreen size available)

Start from \$11.90

Universal Protector Film

- Waterproof, Dustproof, Germproof
- Designed for Notebook Key Board, Computer Keyboard, Remote Controller, Cordless Phone, Electronics, Hospital, Demo Sample Wrap, etc.

Only \$13.50

Destinator 6.0 \$128.90
(N. America) is available now!
TomTom Navigator 6.0
(Pocket PC & Palm version) is coming SOON!

PeriPower
PROTECTOR FILM
for Notebook and Electronic Devices Body

- Baby your device with Scratch-Resistance. Protect your investment with Elegance.
- Easy DIY & Removal. No Residue of Glue.
- Transparent / Stylus Pattern

Start from \$8.90

Canada@RunGPS.com
www.RunGPS.com
Toronto • Vancouver 604-279-9938
#12-11220 Voyageur way, Richmond, BC
RESSELLER WELCOME!

CTS - CompuTrak System -

http://www.computraksystem.com for latest prices and products

Tel: (604) 270-6797
Fax: (604) 270-9161

Store Hours:
Mon - Fri: 11:00-6:30
Saturday: 12:00-5:00
Sunday: Closed

AMD Base System

AMD Sempron 3000+ (on-board)
ECS 761GX-M Motherboard
512MB DDR PC-3200 memory
80GB Ultra-ATA 7200rpm
Integrated 3D graphics accelerator
3D sound on-board
LG 16X DVD
Edifier 2.0 speaker
13.5" ATX case w/ 450W
Multimedia keyboard
Optical wheel mouse
Integrated 10/100 Ethernet

Only \$299

AM2 Workstation

AMD Athlon 64 (AM2) 3200+
ASUS M2V-MX Motherboard
512MB DDR II PC-4200 memory
160GB SATA II 7200rpm
Integrated 3D graphics accelerator
3D sound on-board
LG 18X DVD/RW drive
12-in-1 Card Reader
Edifier 2.0 speaker
13.5" ATX case w/ 450W
Multimedia keyboard
Optical wheel mouse
Integrated 10/100 Ethernet

Only \$399

AM2 Extreme

AMD Athlon 64 (AM2) 3500+
ASUS M2N-MX Motherboard
1GB DDR II PC-4200 memory
250GB SATA II 16MB 7200rpm
Integrated 3D graphics accelerator
3D sound on-board
LG 18X DVD/RW drive
12-in-1 Card Reader
Edifier 2.0 speaker
13.5" ATX case w/ 450W
Multimedia keyboard
Optical wheel mouse
Integrated LAN

Only \$499

AM2 Dual-Core System

AMD Athlon 64x2 (AM2) 3800+
ASUS M2NPV-VM Gigabit LAN
1GB DDR II PC-5300 memory
320GB SATA II 16MB 7200rpm
Integrated 3D graphics accelerator
8-channel 3D sound on-board
LG 18X DVD/RW drive
12-in-1 Card Reader
Edifier 2.0 speaker
13.5" ATX case w/ 450W
Multimedia keyboard
Optical wheel mouse

Only \$599

AM2 Extreme Dual-Core

AMD Athlon 64x2 (AM2) 3800+
ASUS M2N-E Gigabit LAN
2GB DDR II PC-5300 Dual Channel
320GB SATA II 16MB 7200rpm
EVGA 7800GS KO 256MB PCI-E
8-channel 3D sound on-board
LG 18X DVD/RW drive
1.44MB Floppy Drive
12-in-1 card reader
Edifier 2.1 speaker
17" ATX case w/ 350W p.s.
Multimedia keyboard
Optical wheel mouse

Only \$899

Dual Core Workstation 2

Intel Pentium D 820 2.8GHz S775
Asrock 775i65G S775 USB2.0
512MB DDR II PC-4200 memory
80GB Ultra-ATA 7200rpm
Integrated 3D graphics accelerator
3D sound on-board
12-in-1 Card Reader
LG 18X DVD/RW drive
Edifier 2.0 speaker
13.5" ATX case w/ 450W
Multimedia keyboard
Optical wheel mouse
Integrated 10/100 Ethernet

Only \$399

Core 2 Junior Extreme

Intel Core 2 Duo (E6300) 1.86GHz
Asus P5L-MX Motherboard
512MB DDR II PC-4200 memory
160GB SATA II 7200rpm
Integrated 3D graphics accelerator
3D sound on-board
12-in-1 Card Reader
LG 18X DVD/RW drive
Edifier 2.0 speaker
13.5" ATX case w/ 450W
Multimedia keyboard
Optical wheel mouse
Integrated 10/100 Ethernet

Only \$539

Core 2 Extreme Pro

Intel Core 2 Duo (E6400) 2.13GHz
Asus P5LD2-VM/HD Motherboard
512MB DDR II PC-4200 memory
250GB SATA II 16MB 7200rpm
Integrated 3D graphics accelerator
8-channel audio on-board
LG 18X DVD/RW drive
12-in-1 Card Reader
Edifier 2.0 speaker
13.5" ATX case w/ 450W
Multimedia keyboard
Optical wheel mouse
Integrated Gigabit LAN

Only \$669

Core 2 Ultimate

Intel Core 2 Duo (E6600) 2.4GHz
Asus P5B-VM Motherboard
2GB DDR II PC-5300 Dual Channel
320GB SATA II 16MB 7200rpm
Integrated 3D graphics accelerator
8-channel audio on-board
LG 18X DVD/RW drive
12-in-1 Card Reader
Edifier 2.0 speaker
13.5" ATX case w/ 450W
Multimedia keyboard
Optical wheel mouse
Integrated 10/100 Ethernet

Only \$888

Barebone Specials

- Authenticity Performance**
 - P4 775 and AMD 64 930
 - Unique double layer frame
 - Practical Functionality
 - Expand depending on needs

Start From \$ 143
- Space & Productivity Revolution**
 - P4 Socket 775 & AMD Socket 930
 - Creative Space Utilization
 - All-around multimedia machine

Start From \$ 183
- Value Barebone**
 - P4 775 and AMD AM2
 - Practical functionality
 - Stylish appearance
 - Extra Performance

Start From \$ 163
- First Broadcaster RTX Platform**
 - supports latest Intel Core CPU
 - low power consumption

Start From \$ 223
- Shuttle**
 - Compact outside-Smart inside
 - P4 and AMD Athlon/Dual media available
 - Style performance and efficient
 - All models equipped with S-ataX technology for super quiet
 - super cool systems

Start From \$ 153

 Ridata 52x CD-R Spindle of 50 \$10.99	 HP 16x DVD-R Spindle of 50 \$15.99	 LINKSYS WRT54GR \$63.99	 WUSB54GP-BP \$36.99	 Edifier M1300B \$23.99
 Bluetooth Dongle \$16.99	 LG F1-2245A9 C2 Duo 1.6 \$966.99	 lenovo LENOVO C200 C2 Duo 1.66, 3G Vista Home \$879.99	 acer A55570 Solo 1.86 80G Vista Home \$703.99	 VGeat TalkCam 1.1 \$33.99
 LG 4GB USB Drive \$56.99	 Adata Secure Digital 2G \$33.99	 7" LCD Digital Photo Frame \$116.99	 Logitech Cordless MX3200 \$83.99	 Aopen X1000 wireless Laser \$26.99

ASUS Extreme

ASUS

Notebooks Specials

Call for specifications and availability

ASUS A9RP

Value Notebook
Intel Celeron M 1.86 15" XGA
512MB DDR2 533
80GB 5400rpm
2AX Combo
Wireless LAN
4-in-1 Card Reader
Vista Home

ASUS A8M

Portability
AMD Turion 64x2 1.6 14" WXGA
1GB DDR2 667
80GB 5400rpm
DVD-RW DL
Wireless LAN
4-in-1 Card Reader
Vista Home Pre

ASUS A7C

Multi-Media
Intel Core 2 Duo 1.83 Radeon X1450 128
17.1" WXGA
1GB DDR2 667
120GB SATA
DVD-RW DL
Wireless LAN
1.3 MP Camera
4-in-1 Card Reader
Vista Home Pre

ASUS G1

Gaming Notebook
Intel Core 2 Duo 2.0 Nvidia G7700 512MB
15.4" WXGA
2GB DDR2 667
160GB SATA
DVD-RW DL
Wireless LAN
1.3 MP Camera
Vista Home Pre

ASUS R2H

Ultra Mobile PC
Intel Celeron M 900MHz
7" LCD Touch Screen
768MB DDR2 533
Secure Digital Reader
80GB 4200
Wireless LAN

ASUS R1F

Smart Tablet PC
Intel Core 2 Duo 1.66 13.3" WXGA
1GB DDR2 667
80GB SATA
DVD-RW DL
Wireless LAN, BT
8-in-1 Card Reader
Vista Business

ASUS S6F

Superior Mobility
Intel Core Duo LV 1.5 11.1" WXGA
1GB DDR2 533
100GB 4200rpm
DVD-RW DL
Wireless LAN
4-in-1 Card Reader
Only 1.37kg

ASUS Vx1

Camborghini
Intel Centrino Duo/Core 2 Duo 2.0 Nvidia 7400TC 512
15" SXGA
1GB DDR2 667
160GB 5400rpm
4-in-1 Card Reader
Wireless LAN
DVD-RW DL
Bluetooth

Also available in Leather Collection

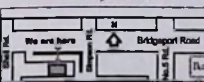

Asus MM17D Zero Bright Dot \$203.99

Acer AL1916WAB \$209.99

LG L1952TX 1400:1 \$239.99

LG 204WTX 2000:1 \$313.99

Acer AL2616WBD \$799.99

We are here  

#5 - 11240 Bridgeport Rd. Richmond, B.C., V6X-1T2

All systems - 1 year parts & 3 years labour warranty
All Prices Reflect 2% Cash Discount
Government And Corporate Purchase Orders Welcome
Financing Available OAC
Prices Subject To Change Without Prior Notice

The Core 2 of the Matter

Dual core rules!

The continuing battle for CPU supremacy between AMD and Intel took a surprising turn over the past year with Intel's one-two punch - that would be the Core and the Core 2, the company's new processor lines. While the company's Core Duo processors mostly found their way into notebook computers, there were a few products that used it on the desktop, notably Apple in its iMac and Mac Mini products.

With the Core 2, there was more of a push to get these processors into desktop computers right off the bat, and for good reason: these new processors use less power than the previous Pentium 4 chips, but also outperform them in raw processing power. While that certainly allows

computer manufacturers to cram higher-performing chips into smaller cases, it also provides a raw power benefit even to power users. With one processor line, Intel managed to find a solution for both the portables and the power users, leaving AMD temporarily in the dust. (Though with a few new technologies just around the corner, you can bet that AMD will leapfrog back into the lead before too much longer.)

Even more interesting is Intel's recent release of the first quad-core processor in the desktop space. The QX6700 processor essentially fused two 2.66 GHz Core 2 processors together in a single module instead of putting all four cores onto a single die, so some might accuse Intel of cheating a bit. Nonetheless, the release of such a product for desktop-

table 1

Processor	Pentium D 955	Core 2 E6700	Core 2 X6800
Core Frequency	3.46GHz	2.66 GHz	2.93 GHz
CPU type	Dual core, HT	Dual core	Dual core
SysMark 2004 SE	241	324	348
Internet Content Creation overall	293	414	449
Office Productivity	198	254	269
PCMark 05 overall	5074	6429	6731
CPU	5567	6786	7482
Memory	4410	5475	5778
Graphics	4737	5058	5070
HDD	4845	4727	4486
Sandra 2004			
CPU Arithmetic ALU (MIPS)	19653	31991	34825
CPU Arithmetic FPU (Mflops)	13028	11898	13075
CPU Multimedia Integer (it/s)	49859	69932	76806
CPU Multimedia Floating Point (it/s)	59962	79039	86586
Memory Bandwidth Integer (MB/s)	5011	5298	5317
Memory Bandwidth Floating Point (MB/s)	5005	5299	5321
Watts consumed - Idle	182	113	113
Watts consumed - Sandra Multimedia	272	169	165



since 1995
<http://www.infonec.com>
 toll: 1-888-418-9338 tel: 416-410-5481

secured eCommerce online shop | Canada wide shipping
 complete pc | notebook | components | accessories | service

ASUS

ViewSonic

SAPPHIRE

OCZ

*some conditions apply, see website for more details

FREE

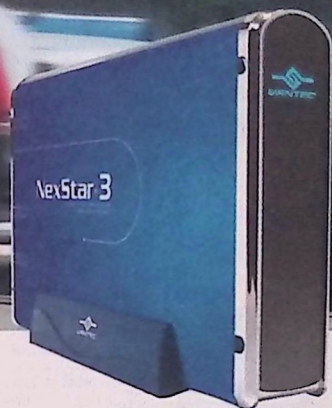
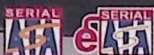


Optical Mouse*
 with any online purchase.
 USE CODE #383YYZ



Up to 5 Times Faster than USB 2.0 !

Serial ATA



Your computer system is only as fast as your slowest component. With the advent of Serial ATA 3Gbps hard drives, storage device is finally catching up with your multi-core CPUs. Vantec will take you to the next generation of peripheral connection. With special designed connector and cable, eSATA cable gives reliable transmission in a blazing speed that's 5x faster than 480mbps USB! This big pipe will revolutionize external storage and enable you to back up your data at least twice as fast.

STORE n SHARE



MUSIC



DATA



PHOTO



MOVIE

SATA External Hard Drive Enclosure



2.5" enclosure also available

SATA Removable Hard Drive Rack



eSATA PCI Express 3.0 Gbps Host Card



eSATA Notebook CardBus



NCIX
www.ncix.com

Canada Computers
www.canadacomputers.com

Memory Express
www.memoryexpress.com

PC Cyber Computer
www.pccyber.com

MicroBytes
www.microbytes.com

Infonoc
www.infonoc.com

Can Computer
www.cancomputer.com

Anitec
www.anitec.ca

BCOM
www.bcom.ab.ca

PC Village
www.pcvillagecanada.com

Logic Computer House
www.logccomputerhouse.com

Filtech Computer
www.filtechcomputer.com

Sonaggi Computers
www.sonaggi.com

Wintronic Computers Plus
www.wintroniccomputers.com

Sonex Computer
www.sonexpc.com

New Type Computer Workshop
www.ntcw.com

Bestbyte Computer Performance
www.bestbytecomputer.com

Mega Computer Systems
www.megacomputer.ca

Robotnik
www.robotnik.com

Extreme PC
www.extreme-pc.ca

Distributed by:



for more information on where to buy please go to
<http://www.vantecusa.com/wheretobuy.html>

Copyright © 2006 Vantec Thermal Technologies. All Rights Reserved.
All Registered Trademarks Belong To Their Respective Companies.



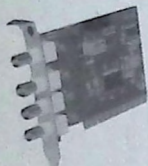
ASI Canada
1-888-2000-ASI
www.asipartner.com



Eprom
1-800-26-EPROM (Ontario)
1-604-214-9829 (British Columbia)
www.eprom.com

LiteOn Computers Security Depot

640 E. Broadway
Vancouver, BC, V5T 1X6
Sales : 604-876-8856



TM
SMARTHOUSE
CCTV

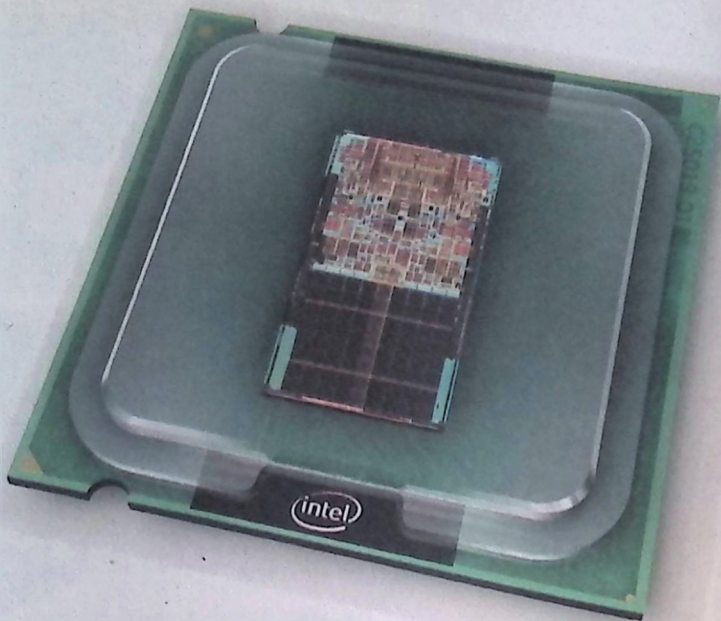
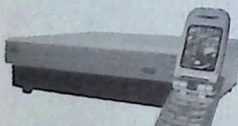
Video Security Systems
WWW.360CCTV.COM

604-304-0707

204-12020 Bridgeport Rd
(Near No. 5 Road)
Richmond BC V6V 1J3



TeleEye
www.teleeye.com



oriented motherboards is a clear indication that the company intends to follow up on the multi-core strategy right across the board. Who knows: a year from now, we may even see eight or 16-core processors available for the desktop.

In the lab with Core 2

Over the past number of months, I've had the opportunity to evaluate a few of the processors in the new Core 2 line, including:

- 2.66 GHz Core 2 Duo E6700 (dual-core, 4MB L2 cache)
- 2.93 GHz Core 2 Extreme X6800 (dual-core, 4MB L2 cache)
- 2.66 GHz Core 2 Extreme QX6700 (quad-core, 8MB L2 cache)

During my initial evaluation, I benchmarked the two dual-core models against the older Pentium D-era 955 processor, which was a 3.46 GHz processor dual-core model. The hardware configuration remained identical throughout - the only change that I made was swapping the processor out. My initial expectation was that the 955 (technically known as the Pentium Processor Extreme Edition 955) would outperform the newer Core 2 models - after all, it not only had a fairly substantial clock speed advantage, but it also featured hyper-threading in addition to the dual cores, adding up to a virtual quad-core configuration. The actual speed tests tell a different story.

See table 1...

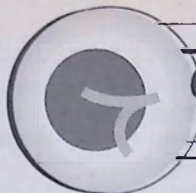
The first thing that's obvious from a look at the numbers is that both of the Core 2 processors outperformed the previously top-of-the-line 955 processor by a fairly substantial margin. It wasn't even close in the vast majority of the benchmarking tests. In fact, the only test where the older 955 processor showed any advantage at all was in the Sandra Arithmetic floating-point test, and that was only against the lesser of the Core 2 models tested.

What's even more impressive is a look at the power consumption numbers for the three processors: not only did the computer use less energy with the Core 2 processors installed - remember, the only difference in the hardware configuration was the processor itself - but the Core 2 configurations used less energy with the processor running at full tilt than the 955 configuration did while idle. So in other words, the Core 2 blows the doors off the older models without even breaking a sweat.

Going quad

If the release of the new Core 2 processors was a surprise, the release of the quad-core version of the processor shortly afterward was even moreso. The big question though: would the home user see any real advantage moving up to a quad-core machine?

The truth of the matter is that the vast majority of users won't see a tremendous speed advantage

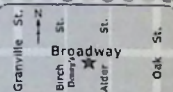


Generic Technology

Computer Sales & Services

www.genericcomputer.com

mon - sat 11:00 - 19:00 sun 12:00 - 16:00



moving from a single-core processor to a dual-core processor, let alone going with a quad-core machine. Why? Most applications currently aren't even capable of using more than one core at a time, so the biggest advantage most users will see is the ability to run different programs on different cores. Ultimately, it's the power users who would really be able to take fullest advantage of such a configuration, so the question is naturally whether those same power users would get an even bigger advantage bumping up to the full four cores.

For the quad-core testing, I again used the exact same hardware configuration for both the dual-core X6800 and the quad-core QX6700, swapping only the processors. (Note: Because a couple of months had elapsed since the initial tests, my main hardware configuration had changed slightly, and consequently I am not comparing the numbers from the quad-core tests directly against the 955 and the E6700 models. That's also why the numbers for the X6800 differed slightly between the two tests, for those playing along on our home game.)

See table 2...

The results here were somewhat less conclusive - while the quad-core processor overcame a slower clock speed to take the lead in all of the CPU-based tests in Sandra 2007 as well as a general overall advantage in PCMark, the dual-core machine achieved the best overall results in our standard application-based benchmark, SysMark 2004 SE.

That happened for one simple reason: the real-world applications used by SysMark

Intel Celeron 331	P4 631 3.0GHz	P4 935 Dual-Core	E6300 Core 2 Duo
PcChips P13G+ (All in one) 512MB PC3200 DDR RAM 80GB (7200rpm) H/D 52x32x52 CD-RW R08 17" ATX Tower Case Keyboard, Mouse & Speakers Upgrade : Pentium4 524 3GHz (+\$30)	Asus P5PE-VM Motherboard 512MB PC3200 DDR RAM 160GB (7200rpm) H/D 18x D-Layer DVD+/-RW Intel Extreme 3D Graphics AC97 6 Channel Audio & Lan Keyboard, Opt. Mouse & Spk	Asus P5GL-MX Motherboard 1G PC5400 DDR2 RAM 250GB (S-ATA 7200rpm) H/D 18x D-Layer DVD+/-RW Intel 950 Extreme Graphics ADI1986A 6 Channel 17" ATX Tower Case Logitech Keyboard & Opt. Mouse Power Amplified Speakers	Asus P5B 1985 Motherboard 1G PC5400 667 DDR2 (D-Channel) 320GB (S-ATA 7200rpm) H/D 18x D-Layer DVD+/-RW Geforce 7300GS 256MB PCI-X 6 Channel Audio & Lan 17" 400W Tower Case Logitech Cordless KB & Mouse Logitech S-200 2.1 Speakers
\$269	\$379	\$559	\$819
AMD Sempron 2800	Athlon64 3500+	Athlon64x2 3800+	Athlon64x2 4200+
Asus K8V-MX M/B 512MB PC3200 DDR RAM 80GB (7200rpm) H/D 52x32x52 CD-RW R08 17" ATX Tower Case Keyboard, Mouse & Speakers	Asus M2V-MX Motherboard 512MB PC4200 DDR2 RAM 160GB (7200rpm) H/D 18x D-Layer DVD+/-RW VIA 3D Graphics & Audio O/B 17" ATX Tower Case Keyboard, Mouse & Speakers Upgrade : GF7300GS 250MB Video (+\$80)	Asus M2NPV-VM AM2 M/B 1G PC5400 DDR2 RAM 250GB (S-ATA 7200rpm) H/D 18x D-Layer DVD+/-RW Geforce 8150 Graphics O/B ALC850 8 Channel Audio & Lan 17" ATX Tower Case Logitech Keyboard & Opt. Mouse Power Amplified Speakers	Asus M2NE NF570 Motherboard 1G PC5400 DDR2 (Dual-Channel) 320GB (S-ATA 7200rpm) H/D 18x D-Layer DVD+/-RW Geforce 7600GT 256MB 8 Channel Audio & Lan 17" 400W Tower Case Logitech Cordless Key & Opt. Mouse Logitech S-200 2.1 Speakers
\$279	\$399	\$529	\$819

Software

Windows Vista Home Basic / Business / Ultimate (OEM) \$119 / 189 / 259 ** with System Purchased ONLY **

MS Office 2003 Basic / SBE \$199 / \$279

All systems come with 1 year parts & 2 years labour warranty

Hot Deals from Acer Notebook Specials!



TN2480-1854 Celeron 1.8GHz	512MB / 60GB / 14.1" DVD+/-RW / Vista Basic	\$649
AS5610-4877 Core Solo 1.8GHz	1G / 80GB / 15.4" DVD+/-RW / Vista Premium	\$799
AS9300-3699 Turlon™ 2.0GHz	512MB / 120GB / 17" DVD+/-RW / Vista Basic	\$809
AS5570-4940 Core Duo 1.6GHz	1G / 160GB / 14.1" DVD+/-RW / Vista Premium	\$899
AS5630-6368 Core Duo 1.6GHz	1G / 120GB / 15.4" DVD+/-RW / Camera / Vista Premium	\$999
AS5630-6675 Core Duo 1.6GHz (Geforce 7300 128MB, 1.3 Megapixel camera)	1G / 160GB / 15.4" DVD-RW / Vista Premium	\$1180
AS5610-6183 Core Duo 2.0GHz (Geforce 7300 128MB, 1.3 Megapixel camera)	1G / 160GB / 15.4" DVD-RW / Vista Premium	\$1499
AS5680-6048 Core Duo 2.0GHz (Geforce 7600 256MB, 1.3 Megapixel camera)	2G / 160GB / 15.4" DVD-RW / Bluetooth / Vista Premium	\$1770

\$29 - Notebook Carry Case \$29 - Wireless Notebook Mouse

Logitech

Optical PS2 Scroll Mouse	\$9
VX Revolution wireless mouse	\$69
QS 2000dpi Laser mouse	\$65
Cordless Desktop Express Combo	\$25
Cordless Desktop S510 Media Combo w/Remote	\$69
Cordless Desktop LX710 Laser Combo	\$75
Cordless Desktop MX5000 Bluetooth Combo	\$139
Premium Stereo Headset	\$25
Quickcam Communicate STX w/ Microphone	\$39
Quickcam Pro 5000 1.3 Pixels	\$75
Quickcam Fusion 1.3 Pixels	\$99
Logitech X-230 2.1 Speaker	\$45
Logitech X-530 5.1 Speakers	\$65
Logitech Z-2300 THX 2.1 Speakers	\$135
Logitech Z-5300c THX 5.1 Speakers	\$170
Logitech Z-5450 Dolby® Digital Speakers	\$420

Mr. Battery

Battery for Notebook, PDA, Digital Camera, Camcorder, Laptop AC/DC Adaptor



Monitor

17" Samsung 793DF Flat CRT	\$119
17" Samsung 701N 600:1 8ms	\$189
19" Acer AL1916W 700:1 5ms	\$209
19" Samsung 940N700:1 8ms	\$245
19" Samsung 940NW Wide 4ms Digital	\$239
19" Samsung 931BW 2ms Digital	\$269
22" BenQ FP222W 1680x1050	\$319

Projector & LCD TV

BenQ MP510 1500ansi 800x600 Projector	\$599
BenQ MP620 2200ansi 1024x768 Projector	\$999
Epson 82c 2000ansi 1024x768 Projector	\$1550
Acer AT3320A 32" LCD HDTV	\$799
Acer AT3720A 37" LCD HDTV	\$1099
Acer AT4220A 42" LCD HDTV	\$1550
Viewsonic N4251w 42" LCD HDTV	\$1700


 Digital Voice
Canada's Best Kept Secret

Visit our Website for More Selections and Specials !!

Price & Special are subject to change w/o notice All prices reflect to cash discount All product names, trademarks are properties of their respective owners

2004 SE are pretty much all incapable of executing on more than one core at a time. This means most of them can't take proper advantage of a dual-core setup, let alone a quad-core setup, which means it all comes down to clock speed at that point. True, most of these applications are a couple of years old by this point, but it's worth noting that will be the case for most

users out there: the majority of applications people will use from day-to-day are NOT optimized for multi-core configurations, and that includes the majority of the PC games out there, too...sorry, performance-hungry gaming fans!

Surprisingly, despite the fact that Adobe PhotoShop CS2 is designed to

table 2

Processor	Intel X6800	Intel QX6700
Core Frequency	2.93 GHz	2.66GHz
CPU type	Dual-core	Quad-core
Cache	4MB	4 x 2 MB
System RAM	2GB dual-channel	2GB dual-channel
SysMark 2004 SE	366	354
Internet Content Creation	475	480
Office Productivity	282	261
PCMark 05 overall	6655	7016
CPU	7458	8507
Memory	5943	5564
Graphics	4144	4071
HDD	5396	5638
Sandra 2007 Business		
CPU Arithmetic Dhrystone (MIPS)	26674	48461
CPU Arithmetic Whetstone (Mflops)	18628	33038
CPU Multimedia Integer (it/s)	160880	291671
CPU Multimedia Floating Point (it/s)	86721	157236
Memory Bandwidth Integer (MB/s)	5732	5611
Memory Bandwidth FPU (MB/s)	5743	5604
Adobe CS2 Photoshop/Illustrator		
Radial Blur 80% Zoom Best quality	0:43	0:23
Contact Sheet II (93 images)	0:51	0:55
Picture Package (93 images)	3:27	3:35
LiveTrace 256 colour	1:04	1:12
Watts consumed - Idle	125	138
Watts consumed - Sandra Multimedia	180	230



For more mediasonic products
please visit www.mediasonic.ca
or e-mail us at sales@mediasonic.ca

Contact Your Local
Wholesaler & Dealer
for more information

OPEN 24 / 7
Mediasonic Online
<http://store.mediasonic.ca>

Mediatec 3.5" MPEG Players

- New 2.5" SATA case available
- For P/SATA 3.5/2.5HDD
- IDE to USB/USB & 1394a
- SATAII to USB+eSATA

3 Years Warranty

Model No: HD3 & HD6-Series

LAN-DRIVE



Model No: HD9-U2LA

- 3.5" HDD Enclosure
- TV output & network access
- Support MPEG1,2,4
- Play movie, music, photo
- USB/network enclosure
- Package comes with remote



Model No: MG-35

2.5" also available
visit our site for detail

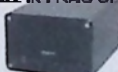
**All MG-35
Feature Plus**

- Wireless Lan
- USB Host
- HD DVI output
- Full HD play back up to 1920 x 1080p



Model No: MG350HD

Advanced Enclosure for Office ALL-IN-1 NAS SERVER AUTO BACKUP DEVICE



- Come with gigabit Lan, BT download
- Web Server+SQLite+PHP
- Support eSATA, USB 2.0, RJ45
- Setup time < 30mins
- visit our website for more detail
- Model No: TS-201 & (Single Drive) TS-101 also available

- Most Advanced backup device
- Hands-free, Auto-sync
- 4 backup modes
- Backup includes outlook my document, etc.
- Advanced Data Encryption

Model No: QBack-25

take advantage of multiple cores, that's only true for certain portions of the program. In our tests, the radial blur filter most definitely benefited from the additional two cores (cutting the render time in half), but automated processes like contact sheet creation showed no apparent benefit.

Worse, the addition of those two additional cores nearly erased one of the big selling points of the Core 2 processors: lower power consumption. While the dual-core and quad-core processors both sported reasonable power consumption while idle, the quad-core became quite power-hungry when the performance needle was pegged, gobbling up 50 watts more than the dual-core CPU.

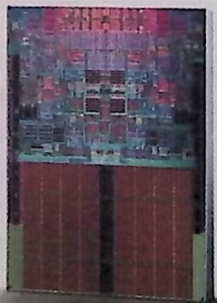
While most of the current system benchmarks showed no huge benefit in the move from dual-core to quad-core, the Sandra tests did show the great potential of the move to quad, with a fairly substantial jump in raw processor power. What that means is that as soon as the majority of the software currently available becomes optimized for multi-core execution, quad-core will really start to pay dividends.

Pricing it out

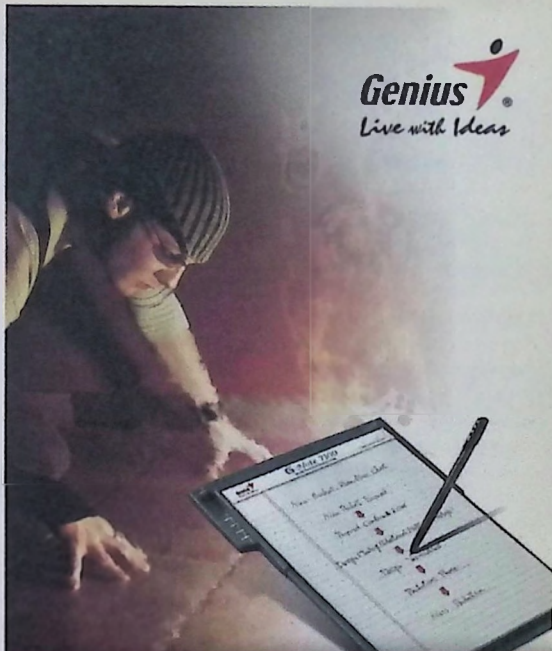
There's no sense beating about the bush: top-of-the-line processors tend to be expensive and that's definitely the case here. In fact, at press time, the Pentium Extreme 955, the Core 2 X6800 and the quad-core Core 2 QX6700 were all hovering around \$1,299 for the processor alone. For those who absolutely must have every ounce of power possible, that makes it a no-brainer to go with the quad-core processor, providing the motherboard is compatible (and you're not trying to cram it into a tiny case).

The good news is that you don't have to go in to the tune of over a grand in order to get top-notch performance, if you're willing to settle for a processor that's a few notches from the top: the E6700 is almost half the price of the two Extreme Core 2 models, but the performance still outshines all of the previous Intel processors.

By Sean Carruthers



Genius
Live with Ideas



SW-Flat2.1 850
Flat Speaker System with
Wood Subwoofer



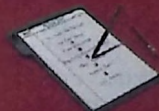
SW-i2.1 1100 BLACK
3 piece Gaming Speakers



HS-04U
USB 5.1 Dolby Headset



SpeedWheel 3 MT
Racing Wheel with
Gear Shifter



G-Note 7100
A4 Size & Two Pens
Digital Note



MousePen 8x6
A4 Size Tablet with
Cordless Pen

WAPAC CANADA

1 604 232 4688
sales@wapac.net
www.wapac.net

ATLANTIA

1 877 985 7257
info@atlantia.ca
www.atlantia.ca

KYE SYSTEM CORP.

Tel: (886) 2 2995-6645 Fax: (886) 2 2995-0704
www.geniusnet.com

Blu-Ray versus HD-DVD

The format war heats up!

Now that 2007 is well underway and the latest HD-DVD and Blu-Ray models are on store shelves, the format war has really begun to heat up. Of particular interest is LG's BHD100 Hybrid player, which has playback support for both HD-DVD and Blu-Ray, but there have been other significant developments over the past few months that will have a huge impact on consumer mind share over the coming year.

With the Launch of Sony's Playstation 3 last November, the number of effective Blu-Ray players in the worldwide market increased by nearly two million units in the few weeks leading up to Christmas. With the European launch of the PS3 scheduled for this month, the Blu-Ray format is bound to get even more support via the PS3's success as a video game console. The fact that the PS3 [even when priced at a whopping \$699] is cheaper than the vast majority of equivalently capable Blu-Ray and HD-DVD players, and also supports a huge library of PS1, PS2 and PS3 games, makes it a very appealing device for home theatre aficionados [regardless of whether or not they intend to use it for video games].

In fact, the initial success of the Playstation 3 has driven sales of format to actually surpass those of HD-DVD [which led sales throughout 2006]. According to Blu-Ray.com, by the second week of January, Blu-Ray movie sales were up 700 percent since the mid-November launch of the PS3; a correlation that's difficult to deny. The continued success of the PS3 is very beneficial to the success of the format, at least until the price of standalone Blu-Ray players drops to more affordable levels.

That said, affordability is something that the HD-DVD format has in its favour and it's a benefit that cannot be underestimated. The Adult Entertainment industry, for example, is leaning towards HD-DVD for the simple reason that it's far easier and, more importantly, cheaper to produce

HD-DVDs than Blu-Ray discs. The cost difference is so great that for many porn studios it just isn't economically feasible to make Blu-Ray versions of their movies. While this may seem trivial [seeing how porn is somewhat of a niche market], the same thing happened during the Beta Max/VHS format war [VHS was notably cheaper, which led to Adult Video support and ultimately market control]. Inexpensive production costs bode well for all small production companies, not just those in the porn industry. Needless to say, a lot of support for the format could end up coming from the independent portion of the movie industry as well.

The advantages of cheaper manufacturing costs of both HD-DVD discs and players transcend further than just the format's movie studio supporters. Because HD-DVD is less expensive than Blu-Ray, many low-cost Chinese and Japanese manufacturers [like Alco, Shincor and Lite-On] have announced their interest in HD-DVD and intend to launch players by the end of 2007. With expected introductory prices between US\$199 and US\$299 - significantly less than the US\$500-600 that current "low-cost" HD-DVD and Blu-Ray players are going for - this would be a major advantage for the HD-DVD format. Not only that, but sub-\$300 is regarded as the "sweet spot" for consumer electronics and if the price variance between the low-end players of both formats lasts long enough, cheap HD-DVD players could gain enough sales to negate the initial success of the PS3.

In the meantime, there is a cheap HD-DVD playback alternative: Xbox 360 users can purchase the Xbox 360 HD-DVD player for \$199 as an affordable way to transition to the HD movie market. While it doesn't support an HDCP connection (it uses analog component cables, not DVI or HDMI), MS is confident that movie studios won't be implementing the security method until 2010, making component cables more than adequate for Hi-Def playback. Additionally, one could always use the Xbox 360 VGA cable to circumvent HDCP protection altogether [assuming your HDTV has a VGA port].

Unless one side starts making mistakes while the other capitalizes on them, we could be seeing dual formats for some time. With products like hybrid players available and hybrid discs in the works, it seems that the consumer electronics industry isn't just embracing both formats, but expecting them to perpetuate. More to the point, with many movie studios supporting both Blu-Ray and HD-DVD, the line is far from drawn and neither format is holding all of the cards. So, as the battle for HD dominance continues, only one thing is clear: it's going to be a brutal encounter that could last quite a while, which is unfortunate for us consumers.

By Mike Palermo

Not all Blu-Ray and HD-DVD movies are the same. Regardless of the technical specifications of either format, some disc transfers aren't nearly as vivid as others. In some cases, the HD versions are no better looking than their upscaled DVD counterparts. While you may not like the movies themselves, here are a couple reference discs that do a good job of showing off the visual quality of either format.

HD-DVD:

Hulk [2003]

King Kong [2005]

Blu-Ray:

Black Hawk Down [2001]

Crank [2006]

www.MilestonePC.com Best deals + GST Only



Asus



LG



Acer



Lenovo



Fujitsu

Vancouver: (E 23 x E24 AVE)
3967 Main Street.
TEL:604-872-4245
TEL:604-872-4215
 Mon - Fri: 10:30AM-7:00PM
 Saturday: 12:00PM-7:00PM
 Closed: Sunday & Holiday

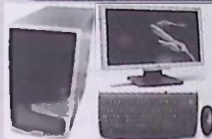


VASTECH

Langley: (204 Street x Douglas Cres)
20410 Douglas Cres.
TEL:604-514-1299
TEL:604-514-1235
 Mon - Fri: 10:00AM-6:00PM
 Saturday: 12:00PM-6:00PM
 Closed: Sunday & Holiday

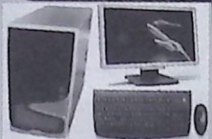
For more selections and updated price please check :
www.vastechcomputer.com

Best Buy #1 : Intel Pentium 4 (650) 3.4G-----\$678



ACER AL1916Wab 19" LCD, 1440 x 900 / 700:1 / 5ms
 Intel Pentium 4 (650) 3.4Ghz Processor
 ASUS P5GZ-MX / SATA / USB2.0 / Giga LAN / Audio
 1024MB DDR-II 533 RAM / 18x DVD-RW w/software
 WD S-ATA 250G (8M) HDD / On AGP8X Open Slot
 5020 ATX Tower + 400W Power Supply
 Logitech DX-250 Keyboard + Optical Mouse

Best Buy#2 : AM2 Dual Core 3800+-----\$718



ACER AL1916Wab 19" LCD, 1440 x 900 / 700:1 / 5ms
 AMD AM2 Dual Core 3800+ (2.0G) Processor
 ASUS M2NBP-VM/CSM DDR2 / PCI-Express Motherboard
 1024MB DDR-II 533 RAM / 18x DVD-RW w/software
 WD S-ATA 250G (8M) HDD / On PCI-Express Open Slot
 5020 ATX Tower + 400W Power Supply
 Logitech DX-250 Keyboard + Optical Mouse

Notebook Special

ASUS A8F-H071H Core 1.8G, 1G RAM, 80G, DVDRW, Wireless
 ASUS, 56K, 14.1", XP Home(2 years MF Warranty)-----\$1088
 ASUS F3JC-AP141C Core2Duo 1.66G, 1G RAM, 80G, DVDRW,
 Wireless, USB, 56K, 15.4", Vista Home Premium-----\$1488
 Acer AS55570-4940 Core Duo 1.66G, 1G RAM, 160G, DVDRW,
 Wireless, USB, 56K, 14.1", Vista Home Premium-----\$888
 Acer AS5610-4039 Core Duo 1.66G, 2G RAM, 80G, DVDRW,
 Wireless, USB, 56K, 15.4", Vista Home Premium-----\$998
 Acer AS5680-6048 Core 2 Duo 2.0G, 2G RAM, 160G, DVDRW,
 Wireless, USB, 56K, 15.4", Vista Home Premium-----\$1738

Upgrade Special

ECS 761GX-M754 Motherboard + Sempron 3000+-----\$96.99
 ECS P4M900T-M + Intel Pentium4 (541) 3.2Ghz-----\$155.99
 ECS 945GZT-M-V1 + Intel Dual Core (915) 2.8G-----\$189.99
 ECS Nforce 570 SLI-A + Core2 Duo (e6300) 1.86G-----\$319.99
 Asus P5GZ-MX + Intel Dual Core (915) 2.8G-----\$199.99
 Asus P5W DH DELUXE + Core2 Duo (e6300) 1.86G-----\$479.99
 Asus M2NBP-VM / CSM + AMD AM2 Dual Core3800+-----\$239.99
 Asus M2N-SLI-DELUXE+ AMD AM2 Dual Core3800+-----\$319.99

Windows: OEM Software Purchase With system only:

Vista Home Basic / Premium (32bit)-----\$110 / \$145
 Office 2007 Basic / SBE / PRO-----\$110 / \$260 / \$355
 Vista Business / Ultimate (32bit)-----\$178 / \$245
 Office 2007 Home & Student / Install CD-----\$165 / \$25
 Vista Home Basic / Premium (64bit)-----\$120 / \$155
 Office 2003 SBE / Student & Teacher-----\$125 / \$135
 Vista Business / Ultimate (64bit)-----\$188 / \$255
 Kaspersky Anti-Virus / Internet Security-----\$25 / \$35
 Win XP Home / Pro / 64bit-----\$105 / \$155 / \$175
 Norton 07 Anti-Virus / Internet Security-----\$22 / \$32
 03 Server STD w/ Suser / Suser-----\$789 / \$168
 03 Server SBE w/ Suser / Suser-----\$485 / \$485
 McAfee 07 Anti-Virus / Internet Security-----\$12 / \$22

Game Lover: Intel E6600-----\$1888



Logitech G5 Gaming Laser Mouse
 Intel Core 2 Duo (E6600) Processor
 ASUS P5B-E / IEEE1394 / S-ATA-II MB
 ASUS EN8800GTX / 768M PCI-Express
 Kingston 2GB DDR-II 667 Mhz RAM
 S-ATA-II 400GB 7200rpm (16M) HDD
 ALL IN ONE CARD READER (32 in 1)
 LG 18x DVD-RW with Burning software
 24" Raidmax Scorpio668 Aluminum Case
 BFG 650W POWER SUPPLY 12mm Fan



Logitech QC Communicate
 \$39.88



Acer 1916WAB 19" LCD 5MS
 \$207.88



LG 18x DVD RW Dual Layer (22x)
 \$35.88



Samsung 80G 2.5" HDD 8M
 \$70.88



Seagate 400G IDE (16M)
 \$148.88



2.0G USB Pen Drive
 \$27.88



Linksys WUSB54GP
 \$35.88



Linksys WRT54GR
 \$59.88



SMC WUSB54G 108Mbps (USB)
 \$29.88



Trandnet 108M PCI
 \$35.88



Thermaltake 430W Dual Fan
 \$42.88



Logitech G5 Laser Mouse
 \$45.88



Asus AX1950pro 256M DDR3 PCIe
 \$209.88



Brother DCP-130C 3 in 1 Printer
 \$58.88



Zippy Office WK9100
 \$17.88



Zippy USB WK711
 \$17.88



Zippy Mini USB WK610
 \$25.88



Logitech LX170 Wireless Combo
 \$67.88

AMD Value

Sempron (754) 3000+-----\$279
 ECS 761GX-M754 AGP8X
 512MB DDR400 RAM
 80GB (8M) 7200rpm HDD
 LG DVD-RW 18X +/- Dual Layer
 ONE AGP8X Open Slot
 USB2.0 / 10/100 LAN and Audio
 350W Tower Case w/ 2x USB
 Keyboard + Wheel Mouse
 Multimedia Speakers

AM2 Power

Sempron (AM2) 3400+-----\$379
 Athlon64 (AM2) 3800+-----\$429
 Dual Core (AM2) 3800+-----\$479
 FOXCONN KBM8902M2A-RS2
 512 MB DDR-II (PC3500) RAM
 S-ATA-II 160GB (8M) 7200rpm HDD
 LG DVD-RW 18X +/- Dual Layer
 ONE PCI-Express Open Slot
 USB2.0 / Integrated 10/100 LAN & Audio
 400W Tower Case w/ 2x USB
 Powerdata Keyboard + Optical Mouse
 Multimedia Speakers

AM2 PRO

Athlon64 (AM2) 3800+-----\$529
 Dual Core (AM2) 3800+-----\$559
 Dual Core (AM2) 4200+-----\$609
 FOXCONN 6100M2MA-BEKRSH2H
 1024 MB DDR-II (PC3500) RAM
 S-ATA-II 250GB (8M) 7200rpm HDD
 LG DVD-RW 18X +/- Dual Layer
 Nvidia 6200TC 64MB (upto 256M) PCIe
 USB2.0 / Integrated 10/100 LAN & Audio
 400W Tower Case w/ 2x USB
 Powerdata Keyboard + Optical Mouse
 Edifier M1300 2.1 Speakers

AM2 Gamer

Dual Core (AM2) 3800+-----\$729
 Dual Core (AM2) 4200+-----\$779
 Dual Core (AM2) 4600+-----\$819
 ASUS M2V S-ATA-II PCI-Express
 1024 MB DDR-II (PC3500) RAM
 S-ATA-II 320GB (16M) 7200rpm HDD
 LG DVD-RW 18X +/- Dual Layer
 Nvidia 7800GT 256M DDR3 PCI-Exp
 USB2.0 / Integrated 10/100 LAN & Audio
 420W Tower Case w/ 2x USB
 Logitech Keyboard + Optical Mouse
 Edifier M1300 2.1 Speakers

AM2 Premium

Dual Core (AM2) 3800+-----\$909
 Dual Core (AM2) 4200+-----\$959
 Dual Core (AM2) 4600+-----\$999
 ASUS M2N S-ATA-II PCI-E
 2048 MB DDR-II (PC3500) RAM
 S-ATA-II 400GB 7200rpm (16M) HDD
 LG DVD-RW 18X +/- Dual Layer
 Nvidia 7900GS 256M DDR3 PCI-Exp
 USB2.0 / Integrated 10/100 LAN & Audio
 420W Tower Case w/ 2x USB
 Logitech Keyboard + Optical Mouse
 Edifier M1300 2.1 Speakers

Intel Value

Celeron (356) 3.33G-----\$339
 Intel P4 (541) 3.20G-----\$359
 Intel P4 (650) 3.40G-----\$379
 Asus P5PE-VM / S-ATA / AGP8X MB
 512 MB DDR-400 (PC3200) RAM
 80GB (8M) 7200rpm HDD
 LG DVD-RW 18X +/- Dual Layer
 ONE PCI-Express Open Slot
 USB2.0 / Integrated 10/100 LAN & Audio
 350W Tower Case w/ 2x USB
 Keyboard + Wheel Mouse
 Multimedia Speakers

Intel Power

Intel P4 (650) 3.40G-----\$399
 Dual Core 915 2.80G-----\$409
 Core 2 Duo (E6300)-----\$519
 ECS P4M900T-M2 DDR-II PCI-Exp
 512 MB DDR-II (PC3500) RAM
 S-ATA-II 160GB (8M) 7200rpm HDD
 LG DVD-RW 18X +/- Dual Layer
 ONE PCI-Express Open Slot
 USB2.0 / Integrated 10/100 LAN & Audio
 400W Tower Case w/ 2x USB
 Powerdata Keyboard + Optical Mouse
 Multimedia Speakers

Intel PRO

Dual Core 915 2.8G-----\$545
 Core 2 Duo (E6300)-----\$649
 Core 2 Duo (E6400)-----\$689
 Asus P5VD2-X Dual SATA RAID
 1024 MB DDR-II (PC3500) RAM
 S-ATA-II 250GB (8M) 7200rpm HDD
 LG DVD-RW 18X +/- Dual Layer
 Nvidia 6200TC 64MB (upto 256M) PCIe
 USB2.0 / Integrated 10/100 LAN & Audio
 400W Tower Case w/ 2x USB
 Powerdata Keyboard + Optical Mouse
 Edifier M1300 2.1 Speakers

Intel Gamer

Core 2 Duo (E6300)-----\$819
 Core 2 Duo (E6400)-----\$859
 Core 2 Duo (E6600)-----\$959
 ECS N570SLIT-A S-ATA-II PCI-Exp
 1024 MB DDR-II (PC3500) RAM
 S-ATA-II 320GB (16M) 7200rpm HDD
 LG DVD-RW 18X +/- Dual Layer
 Nvidia 7800GT 256M DDR3 PCI-Exp
 USB2.0 / Integrated 10/100 LAN & Audio
 420W Tower Case w/ 2x USB
 Logitech Keyboard + Optical Mouse
 Edifier M1300 2.1 Speakers

Intel Premium

Core 2 Duo (E6300)-----\$1019
 Core 2 Duo (E6400)-----\$1059
 Core 2 Duo (E6600)-----\$1159
 ASUS P5LD2 S-ATA-II PCI-Exp
 2048 MB DDR-II (PC3500) RAM
 S-ATA-II 400GB 7200rpm (16M) HDD
 LG DVD-RW 18X +/- Dual Layer
 ATI X1950PRO 256M DDR3 PCI-Exp
 USB2.0 / Integrated 10/100 LAN & Audio
 420W Tower Case w/ 2x USB
 Logitech Keyboard + Optical Mouse
 Edifier M1300 2.1 Speakers

All system have a 3 year labor & 1 year parts limited warranty.

Price & availability are subject to change without notice. All trademarks & brands are properties of their owners. All advertised prices reflect 3% cash or interac discount. We reserve the right to correct typographical errors.

Sony Ericsson K790a



A phone that's a camera... or is it vice versa?

Do you know what's so remarkable about a singing dog? It's not that it can sing well, but rather, that it can sing at all. The first camera phones were like singing dogs – no one really expected them to be much of a camera, and sure enough the VGA resolution of most of those first camera phones weren't suited for much more than email. But they were a cool novelty.

Now, Sony Ericsson has stuffed a 3.2 megapixel camera in its Cybershot K790a smartphone, easily good enough for 4x6 snapshots – bigger if you take some care in composing the shot. And storage won't be a problem because the phone also has a Memory Stick Micro card slot.

It's a phone

The phone portion is attractive enough, but nothing special in this era of designer smartphones. It's your basic black candy bar phone, with bright and smoked metal accents.

But it has a nice heft to it and feels well put together. It has a standard phone touchpad. A stubby joystick is used for onscreen navigation and it's surrounded by special-function keys.

Beyond the basic phone are a number of applications that people have come to expect from a smartphone – personal information organizer, contact list, email, media player, games, ring tone organizer and Internet browser. A somewhat unusual feature is the built-in radio tuner. The organizer has the expected calendar, to do list and notepad, but also a stopwatch and a timer.

It's a camera

A small hump on the back (the lens assembly, covered by a sliding metal plate) is the first indication that this might not be an ordinary phone. When you hold the phone horizontally and look at it from the back, an interesting transformation takes place. It looks like a digital camera, not a phone. It even has the shutter properly placed on what is now the top edge of the camera, and has a built-in flash. And this orientation encourages you to hold it like a camera – and I found the picture taking much easier because of that.

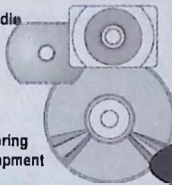
The camera has an extensive range of controls – everything you'd expect from a point-and-shoot camera. Other than the shutter button, however, there are no camera-specific buttons or dials so everything needs to be set using the onscreen menu system. The menu is well organized, but it does take more time than twirling a dial.

For exposure control, you can select one of seven scene settings plus auto. The lens is auto focusing, but you can set it to macro mode or to infinity. You can choose normal or fine image quality, and set the resolution at VGA, one, two or a full 3.2 megapixels. There are also a few shooting modes, including panorama stitching and BestPic. The camera has several white balance presets plus auto. Exposure metering can be

CD / DVD PRODUCTION SOLUTIONS

Business card CD
Mini / Shape CD
Standard CD ROM / Audio
CDR DVD-R Copiers
CDR DVD-R Printers
Media Supplies
Packaging Supplies

CD / DVD Duplication / Replication
CDR / DVD-R Printing
Offset / Digital Printing
Assembling & Packaging
Fulfillment
Tape to DVD conversion
(8mm, mini DV, VHS)



**Quality Service
Fast Turnaround**

Also available:
DVD / CDROM Authoring
Marketing CD development
Video Production
Multimedia / Graphics Design

Visit our web site for references and client list

www.progressmarketing.com

QUALITY CD/DVD MEDIA & ACCESSORIES

CD/DVD media
Label kit
Label supplies

CD jewel cases / paper sleeves
DVD boxes (holds 1,2,3,4,6,8,9,10)
Clamshells

For pricing please visit : www.progressmarketing.com/pricing.htm



PROGRESS Marketing Inc
www.progressmarketing.com

#110 - 12811 Clarke Place, Richmond, BC V6V 2H9
Tel: (604) 821-0066 (800) 818-6944
Email: info@progressmarketing.com
Hours: Mon - Fri 9 am - 5 pm

1 Since 1994
Years of Excellence

Direct sales line:

Richard: 778-371-1290 Email: rpearce@progressmarketing.com

WWW.PROGRESSMARKETING.COM

normal or spot. There's even a self timer.

Image quality is generally quite good, but I took some early morning shots through some leafless trees and noted some haloing of the branch outlines against the sky. The snow on the ground also showed a fair bit of digital noise. But I'd be confident to blow the images up to 5x7, more if it were a scene with good balanced lighting.

As well as being a still camera, there is also a video camera mode with two video quality settings. A couple of new settings can be used in video mode, including night shooting and image stabilization mode.

Problems

I had one ongoing problem with this phone. The phone would lockup - this happened when I was trying to change a basic phone setting, recharge the battery or even if the device sat idle for a while. The only way to remedy this was to pull the battery out, put it back in and then restart the phone. I don't want to make too much of this because the phone was from an early batch and also part of a review loaner pool so I can't say what kind of treatment it had before I got it. Nevertheless, it marred what could have been a very satisfying experience. Lockup issue aside, the device feels right as both a phone and camera.

By David Tanaka

	Richmond Tel: 604-214-7703 604-214-7705 Fax: 604-214-7704		Burnaby Tel: 604-293-7779 604-293-7780 Fax: 604-293-7786	
--	---	--	--	--

106-11400 Bridgeport Rd Mon-Fri 10:00-18:30 3978 B East Hastings St. Mon-Fri 10:00-18:00
 Richmond B.C. V6X 1T2 Saturday 10:30-18:00 Burnaby B.C. V5C 6C1 Saturday 10:30-18:00

www.ilync.com

Intel BASIC \$265 ColoronD 326 (2.53G) MSI PM9PM-V MB S3 UniChrome 3D Video Built-In 512M PC4200 DDRII 80G 7200rpm Hard Disk 52x32x52 CD-RW Keyboard / Wheel Mouse Multimedia Speakers 17" ATX Case 450W ColoronD 347 (3.06G) - \$285	Intel SOHO \$345 Pentium4 531 (3.06G 1M) Foxconn P4M9007-8RS2H MB Radeon X300 3D Video Built-In 512M PC4200 DDRII 80G 7200rpm Hard Disk 18x DVD RW Dual Layer Keyboard / Wheel Mouse Multimedia Speakers 17" ATX Case 500W Pentium4 631 (3.0G 2M) - \$352	Intel POWER \$449 P4 805 Dual Core (2.66G) Asus P5L-MX MB Intel GMA 950 3D Video 1GB PC4200 DDRII 160G 7200rpm SATAII HDD 18x DVD RW Dual Layer A-Open KB, Optical Mouse Logitech S100 Speakers 17" ATX Case 450W w/USB P4 820 Dual Core (2.8G) - \$462	Intel PREMIUM \$575 P4 820 Dual Core (2.8G) MSI P965 Neo-F MB RX550 512M PCI-E HyperMem 1G PC4200 DDRII 250G 7200rpm SATAII HDD 18x DVD RW Dual Layer A-Open KB, Optical Mouse 2.1 Subwoofer Speakers In-Win Case true 350W P4 915 (2.8G, 4M) - \$585	Intel PLATINUM \$899 Core 2 Duo E4300 Asus P5B MB nVidia 7600GS 256M PCI-E 2G PC5300 DDRII 320G SATAII HDD 18x DVD RW Dual Layer Logitech KB, Optical Mouse Edifier M1300 2.1 Speakers CoolerMaster Case true 430W Core 2 Duo E6300 - \$919
AMD BASIC \$259 Sompron 3000+ mobile ECS 761GX-M MB Integrated SiS Ultra256 3D Graphics 512M PC4200 DDRII 80G 7200rpm Hard Disk 52x32x52 CD-RW Keyboard / Wheel Mouse Multimedia Speakers 17" ATX Case 450W	AMD SOHO \$308 Sempron4 4M2 3000+ MSI K9VGM-V MB VIA Chrome9 3D Video Built-In 512M PC4200 DDRII 80G 7200rpm Hard Disk 18x DVD RW Dual Layer Keyboard / Wheel Mouse Multimedia Speakers 17" ATX Case 500W Athlon4 AM2 3200+ - \$342	AMD POWER \$429 Athlon64 AM2 3200+ Asus M2N-MX MB nVidia 6100 3D Video Built-In 1GB PC4200 DDRII 160G 7200rpm SATAII HDD 18x DVD RW Dual Layer A-Open KB, Optical Mouse Logitech S100 Speakers 17" ATX Case 450W w/USB Athlon64 AM2 3500+ - \$445	AMD PREMIUM \$549 Athlon64 AM2 3500+ Asus M2N MB RX550 512M PCI-E HyperMem 1G PC4200 DDRII 250G 7200rpm SATAII HDD 18x DVD RW Dual Layer A-Open KB, Optical Mouse 2.1 Subwoofer Speakers In-Win Case true 350W Athlon64 AM2 X2 3800+ - \$579	AMD PLATINUM \$799 Athlon64 X2 3800+ Asus M2N-E MB nVidia 7600GS 256M PCI-E 2G PC5300 DDRII 320G SATAII HDD 18x DVD RW Dual Layer Logitech KB, Optical Mouse Edifier M1300 2.1 Speakers CoolerMaster Case true 430W Athlon64 X2 4200+ - \$849

Epson Stylus CX3810 All-in-1 Printer 18/9 ppm, 1200x600 dpi, colour Inkjet printer, scanner, Copier \$65.95	UPGRADE SPECIAL AMD Sempron 3000+ 754pin Motherboard w/Video, Audio, LAN Fan / Heatsink included oem \$95.50	Acer As5570-4940 vista premium Intel Core Duo T2050 1.66G 1GB (512x2) DDRII 533MHz 160GB 5400rpm Hard Drive 14.1" WXGA (1280x800) DVD RW Dual Layer Intel 950 Integrated Built-In 1.3MP Camera WLAN, Vista-Premium, 2 Years Warranty \$988	Asus F3JC - vista premium Intel Core 2 Duo T5500 1.66G 1GB DDRII 667MHz 120GB 5400rpm Hard Drive 15.4" WXGA (1280x800) DVD RW Dual Layer nVidia 7300 128MB Built-In 1.3MP Camera WLAN, Vista-Premium, 2 Years Warranty \$1449
Mediasonic Rechargeable NiMH/NiCd Charger/Battery AAA x2 or AA x2 AAA/AA 4 in 1 pack \$8.95 \$8.45	Logitech S510 Cordless Thin, Sleek, Flat Screen styling Batteries last up to 6 months \$55.95	Logitech Premium 350 USB Headset OEM \$19.95	Logitech G5 Battlefield 2142 Edition Gaming Laser Mouse 2000 dpi, Special edition OEM \$35.95
LG GSA-H42N 18x DVD Writer Dual Layer Support \$35.95	Samsung 205BW 20" Widescreen LCD 1680x1050 600:1 6ms DVI-D HDCP HAS Stand \$268	Intel Core 2 Duo E4300 1.8GB 2M 800Mhz CPU 65nmVT \$204.95	SmartDrive 2.5" Enclosure + Samsung 120GB NB HDD \$111.95
Windows Vista OEM Home Basic 32/64 bit - \$109/\$115 Home Premium 32/64bit - \$139/\$145 Business 32/64 bit - \$169/\$175 Ultimate 32/64 bit - \$239/\$242	eVGA 7900GSKO 256MB PCI-E VGA Card 500 MHz GPU 20 Pixel Pipelines 256bit DDR3 \$185	Linksys WUSB54GP Wireless Portable USB Swing-up Antenna, USB Extension base \$34.95	Transcend 4GB 150x Secure Digital \$53.95

All Product name & trademarks are properties of their respective owners. iLYNC is not responsible for any errors or omissions. Price & Availability is subject to change w/o notice. Advertised prices are cash discounted. Product images are not exactly as shown. *After Mail-in Rebate.

Under the platter

The technology of Blu-ray and HD-DVD

The hotly anticipated skirmish between the latest high-density optical disc formats has finally hit the battlefield. High Definition DVD (HD-DVD), all alone and unchallenged for the first few months of 2006, grabbed an easy early lead, but the late-to-the-dance Blu-ray has recently cut hard into that advantage and now threatens to overwhelm the HD-DVD camp by means of its inclusion in the vaunted Playstation 3 console, if nothing else. Early 2007 sales figures show a distinct swinging of the pendulum, but for how long? Which will eventually prevail? Which is better for your own specific needs? And, considering what might lie just down the road, does any of it really matter in the long run?

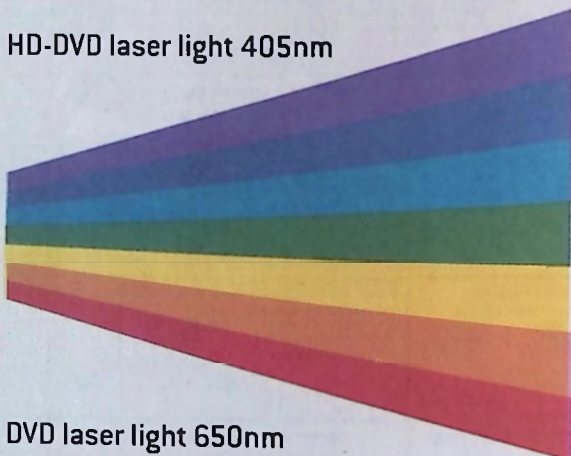
Developed jointly by Toshiba and NEC and supported by power players such as Universal Studios and Microsoft, HD-DVD is the more evolutionary rather than revolutionary of the two. Indeed, an HD-DVD disc so closely resembles a DVD disc that existing DVD disc production lines need to be modified only slightly to manufacture HD-DVD discs – hence the reason HD-DVD arrived sooner and offers a more affordable entry fee than its foe.

But that's also the reason HD-DVD discs aren't as spacious as Blu-ray discs.

Like DVDs, HD-DVDs are 12 cm thick, featuring a pair of 0.6mm polycarbonate substrates fastened back to back and a bonding agent in between. A single, reflective layer lies in the middle, upon which rests a shallow, spiral groove that winds from the middle to the outside of the disc. This groove guides the laser on its journey past a long series of aberrations (commonly called "pits," "lands" or "bumps") created during the burning process. The pits absorb light while the lands reflect it, and an optical pickup monitors the transitions between them.

The real difference between an HD-DVD disc and a traditional DVD is the size of the grooves and aberrations. At just .40 microns and 204 nanometers respectively, the grooves and pits are almost half the size of those in an old school DVD. And that translates to much higher data storage capacities – 15 GB on a single layer HD-DVD vs. a mere 4.7 on a single-layer DVD. Indeed, double-sided HD-DVDs – in which the top layer is semi-transparent and allows the laser to pass through to the second layer – offer 30 GB capacities. Of course, narrower grooves and smaller aberrations necessitate a narrower, more precise laser beam too – a 405-nanometer laser in fact, compared to the 650-nanometer traditional DVD beam (a human hair is

HD-DVD laser light 405nm



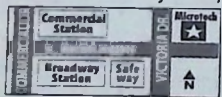
DVD laser light 650nm

violet: approx. 400nm
indigo: approx. 445nm
blue: approx. 475nm
green: approx. 510nm
yellow: approx. 570nm
orange: approx. 590nm
red: approx. 650nm

MICROTECH Cyber Service

tel: (604) 266-9890
tech: (604) 266-9851
www.microtechpc.ca
e-mail: info@microtechpc.ca

1923 E. Broadway, Vancouver
(1 block E. of Broadway Station)



System Specials

- ECS/MSI SATA M.B. / 256MB DDR
- 80GB 7200rpm HD/ 52x CDROM
- Integrated Enhanced 64MB AGP
- Lan Card/ Audio/ 17" 350W Case
- Sempron 2800+\$239
- Celeron 3.06GHz\$259
- Intel P4 3.0GHz\$289

Upgrade

- 256MB to 512MB DDR ..\$29
- HDD 80GB to 160GB ..\$19
- CDROM to DVD RW ..\$29
- MS-XP Home/Pro ..\$99/159
- MS-VISTA Home Basic ..\$119
- MS-VISTA Premium ..\$149
- Norton Antivirus 2007 ..\$25

External USB 2.0 and Firewire Drives

- 3.5" 80/160/250/320/500GB\$69/89/99/139/219
- 2.5" 40/60/80/100GB\$79/99/115/129

USB 2.0 Flash Memory 1/2/4GB \$19/29/69

NOTEBOOK SPECIAL

Acer AS570 T1350 1.86G/80G/512M/14" VISTA ..\$699

LAPTOP/LCD/LCDTV REPAIR SPECIALIST

SmartPC DIGITAL Surveillance System COMMERCIAL GRADE



In-store demo available

- Intel Pentium4 3.0GHz Processor
- 250GB Hard Drive / 512MB DDRAM
- 4-Channels Capture Card w/ Camera
- 24x7 Recording / Internet Access
- 17" CRT Monitor (free with system)

ONLY \$499

Special:

1. 4-Channels 30fps Capture Card with Recording Software ...\$49
2. 120fps 4 channels Hardware Compression Video Capture Card with MPEG4, H.264 Codec (very low requirement on PC, very clear, commercial grade)\$259

RESSELLERS WELCOME



1231-1231 Bridgeport Rd.
Richmond, B.C. V6V 1J4
Tel: (604) 244-7373
Tech: (604) 244-7373
Fax: (604) 244-7373
E-mail: addax@addax.ca
Mon-Sat 10am-6:30pm
Sun & Holiday 12pm-4pm

ADDAX

Since 1996

Inc.

www.addaxcomputer.com

Super Special

The Lowest price in town

AMD 2800CPU w/ ECS MB
Integrated LAN, Audio, Video
256M DDR Memory, 80G HD
52X32X52 CD-RW, 18" ATX Case
PS2 Keyboard, Wheel Mouse, Speakers

\$239

Please check our web site WWW.ADDAXCOMPUTER.COM for the latest prices and best deals!!

With system prices reflect \$15 cash discount. All system are tested and boxed for 48 hours before shipping. All price & stock are subject to change without notice. Sixties are high speed internet modems with 1 year warranty. All parts are 3 year parts warranty.

Norton Antivirus 2007... \$22. Norton Internet Security... \$24. Win 2003 Enterprise Server w/ 3 cals... \$899. Win 2003 Server w/ 3 cals... \$799. * Extended & 72-hour Express Warranty available upon request with system purchase *

Athlon 64 Am2-3D & Video	AMD Dream Machine	AMD (64bit-am2) - Best Buy	Intel-Super Deal	Intel (4440) Dream Machine	Intel Core 2 Duo
3800 \$639	3800 AM2 \$536	AM2 2800 \$299	Celeron 3.0G \$315	Intel-3.0 Dual Core \$549	Intel 1.86G(E6300) \$729
3800 Dual core \$563	3800 Dual core \$562	AM2 3800 \$357	Intel-2.8 Dual Core \$369	Intel-2.13G(E6400) \$779	Intel 2.13G(E6400) \$779
4200 Dual Core \$718	4200 Dual Core \$616	AM2 Dual Core 3800 \$382	Intel-3.0 Dual Core \$406	Intel-3.0 Dual Core \$584	Intel 2.4G(E6600) \$888
5200 Dual Core \$808	5200 Dual Core \$708	AM2 Dual Core 4200 \$437	Intel-3.4 Dual Core \$465	Intel-3.4 Dual Core \$645	Intel 2.66G(E6700) \$1127
ASUS M2N-E MB(AM2)	MSI AM2 MB w/ USB2.0	MSI AM2 MB w/ USB2.0	ASUS PSVDCMX MB (775)	ASUS PSVDCMX MB w/ USB2.0	ASUS PSN-SLI MB
Samung 1.6G 677MHz DDR2	Samung 1.6G DDR2	Samung 1.6G DDR2	Samung 512 MB DDR2	Samung 1G DDR2	1.0G 667MHz DDR2 RAM
256G SATA II Hard drive	256G SATA II Hard Drive	80G 8M 7200rpm Hardrive	80G 8M 7200rpm Hardrive	256G SATA II Hard Drive	256G SATA II Hard Drive
Multi-Function Card Reader	Multi-Function Card Reader	1.44MB Floppy drive	1.44MB Floppy drive	Multi-Function Card Reader	Multi-Function Card Reader
ATI Radeon X1600Pro 512M PCI-EX	nVidia 7300GT 256MB PCI-E	LG 18X Dual Layer DVD+R	LG 18X Dual Layer DVD+R	nVidia 7300GT 256M PCI-E	GF 7300GT 256M PCI-E
LG 18X Dual Layer DVD+R	LG 18X Dual Layer DVD+R	5.1 Sound Card & Lan Integrated	5.1 Sound Card & Lan Integrated	6 Channel Integrated Audio & Gigab. Lan	6 Channel Integrated Audio & Gigab. Lan
8 Channel Audio & Lan on-board	8 Channel Audio & Lan on-board	PS/2 Keyboard & Wheel Mouse	PS/2 Keyboard & Wheel Mouse	Logitech Internet Keyboard & Optical Mouse	Logitech Internet Keyboard & Optical Mouse
Logitech Keyboard & Optical Mouse	Logitech Internet Keyboard & Mouse	18" P4 400W US Front Case	18" P4 400W US Front Case	18" ATX Case	18" ATX Case
18" QUILT ATX Case	18" QUILT ATX Case	140w Speakers	140w Speakers	2.1 Speakers w/ Sub	2.1 Speakers w/ Sub
1314(FIRE) Port	Logitech R20 Spk w/ Subwoofer	17" LG (1mm) LCD \$189	17" LG (1mm) LCD \$189	17" LG (1mm) LCD \$189	17" LG (1mm) LCD \$189
Logitech R20 Spk w/ Subwoofer	17" LG (1mm) LCD \$189				
18" Samung 940W (4mm, DVI) \$1219					

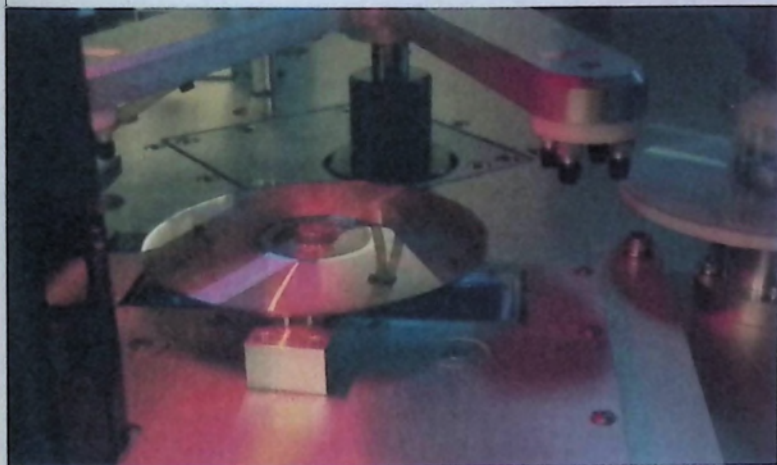
Athlon 64 - SLI Gamer	New Year's gift-Specials	4G USB Drive	2G USB Drive	Intel Xeon Server	Intel Core 2 Duo Gamer
4200 Dual Core Am2 \$1326	All Ink & Toner Models - Only \$5 up	\$45	\$25	Dual Core 3300MHz	Intel 1.86G(E6300) \$1435
4600 Dual Core Am2 \$1369	External 250GB 8MB HD - \$99	SD 4.0G 150x Card - \$58	Universal Travel Laptop Adaptor - \$38	Dual Core 5130(one chip) \$1976	Intel 2.13G(E6400) \$1485
5200 Dual Core Am2 \$1419	External LG 16x DVD+/- DL Writer \$58	FM Transmitter w/ LCD - \$19	Day/Night Wireless Camera - \$59	Dual Core 5130(Two chip) \$2434	Intel 2.4G(E6600) \$1585
ASUS M2N-SLI Deluxe MB(AM2)	250GB 8MB HD - \$79	USB Webcam - \$16	Photo Bank Box - \$55	Intel SS800VAS MB w/ Gigabit LAN	Intel 2.66G(E6700) \$1835
2.0G 800MHz DDR2	USB 2.0 Floppy/PCI card - \$29/\$12	FM Transmitter w/ LCD - \$19	Photo Bank Box - \$55	2x250G SAS RAID (SATA II)	Intel 2.93G(E6800) Quad \$2366
320G SATA II Hard Drive	Wireless Optical Mouse - \$17	Photo Bank Box - \$55	Laptop Cooler Aluminum w/ 3 Blg fas & 4 USB Ports - \$22	2x250G ECC Memory	ASUS PSB-E 965 Chipset MB
Multi-Function Card Reader	USB Lan Adaptor - \$12	Photo Bank Box - \$55	Logitech Z5500 THX - \$319	2G DDR2 ECC Memory	Cenote 2.0G 800MHz DDR2 Kit
nVidia 8800GTS 320M V-Tout	USB Wireless G Adaptor - \$24			16X DVD-ROM Drive	320G SATA II Hard Drive
LG 18X Dual Layer DVD+R	SATA & IDE to USB Adaptor - \$18			Server Case	Multi-Function Card Reader
6 Channel Audio & Lan on-board	USB Super Shock Gamepad - \$16			PS/2 Keyboard & Optical Mouse	LG 18X Dual Layer DVD+R
Logitech Wireless KB & Mouse	Wireless - \$45			Upgrade:	6 Channel Hi-Definition Audio
18" Antec Sonata II Ultra Quiet Case				Raid 5 w/ 4x250G HoSwap HD - \$519	Gigabit Lan on-board
Logitech X530 5.1 spk w/ Subwoofer					Wireless MS Keyboard & Mouse
18" Samung 940W (4mm, DVI) \$1219					Antec Sonata II Ultra Quiet Case
					Logitech X530 5.1 Speakers
					18" Samung 940W (4mm, DVI) \$1219

CPU's	Hard Drives	Notebook Parts	Monitors
AMD Athlon64 Am2 3200/3500/3800	IDE 7200rpm 13M 800... \$50	14" 1466x1050 1280x256 312MB... \$349/4115	17" Flat CRT 19" 25" Digital Flat... \$99/135
AMD Dual Core Am2 3800/4200/4600/5200	800 / 160 / 250 G... \$46/67/79	256GB/128GB 300pin DDR333... \$394/439	NEC LCD 22W/21W/20W/19W/18W... \$239/229/285/329
AMD (939) 3200/3500/3800	320/400G/500G/580G... \$105/142/195/389	512/1GB DDR2... \$69/129	Samung 22W/21W/20W/19W... \$269/459
Celeron 2.5/3.0/3.3	SATA II 800/160/250... \$46/67/79	256GB/128GB 300pin DDR333... \$394/439	Samung LCD 22W/21W/20W/19W... \$269/459
Intel LG475 3.0G	SATA II 320/400/500/580... \$105/142/195/389	PCMCIA to USB2.0 IEEE 1394 TV Tuner... \$104/99	Acer 19" 1600x1200 1280x256 312MB... \$189/259/329
Intel Core 2 Duo E6300 3.0G	WD Raptor 160 300 360 480... \$139/159/235	Universal adaptor Card Adapter/Color... \$59/25	ViewSonic LCD V02230W/VX02202M... \$389/379
		Notebook HD/Memory/Accessories... Call	ViewSonic LCD V01912W/B/W/X235W/M... \$249/339
			ViewSonic 27W151W LCD TVWX2135W/M... \$789/999
Memory	Motherboards	Keyboards & Mice	Cases, Misc. Adaptors
PC-133 SDRAM 128/256(8chips)/512M	Socket A/P405(Gigaset 478)... \$59/69	PS/2 KB/Wheel Mouse... \$7/7	Power supply AT/ATX300W/400W... \$25/24/17
DDR 256/512/1M/2G	ASUS P5LD2/P5P64-W/5(Gigaset 478)... \$124/35	MSLQ Internet keyboard / Natural... \$10/49	18" P4 Case USB front 350W/400W... \$29/19
DDR2 512M/1G	ASUS P5B-MX/PCVDC-X... \$9/59	Logitech Cordless Keyboard & Optical Mouse/MS... \$26/59	Antec Sonata II Ultra Quiet 450W/400W/Arctic(SFF Case)... \$119/39
RAMBUS 800MHz 128/256M	ASUS P5SDH Deluxe/P5N-SLE-SL2... \$245/259	MSLQ Optical Mouse... \$16/14	Acer P1800/1600(Win p)... \$149/131
Compact Flash 512/1/2/4/8G	ASUS P5B-E/P5B-D/VM... \$179/215/149	Logitech Cordless Keyboard & Optical Mouse/MS... \$26/59	Zalmen 7000C/7000D Ultra Quiet CPU Fan... \$39/49
Secure Digital (SD) 0.2/0.4/0.8/1.6/3.2	ASUS M2N-SLI-DM3M... \$169/109	Logitech QWERTY Game Mouse... \$22/15	Vantec Case Light Tower / U/LV Light Tower... \$49/59
USB 2.0 Flash Drive 1/2/4/8G	ASUS M2N-SLI-SLI-DX... \$27/79	Logitech QWERTY Game Mouse... \$22/15	Antec Case Master 680W Silent Pure Power Supply... \$49/59
Memory stick Pro Duo 1.0/2.0/4.0G	ASUS A8V-MXV-KM-X... \$9/29	Logitech QWERTY Game Mouse... \$22/15	Antec Case Master 680W Silent Pure Power Supply... \$49/59
1.0G Micro-SD/XD/RS MultiMedia	MSI Gigabyte, ECS Motherboards... Call	Logitech QWERTY Game Mouse... \$22/15	Antec Case Master 680W Silent Pure Power Supply... \$49/59
Mini SD, smart media, Etc.	Sound Cards & Speakers	Logitech QWERTY Game Mouse... \$22/15	Antec Case Master 680W Silent Pure Power Supply... \$49/59
	5.1 PC Sound Card/USB2.0 Audio 10in(1) 1429	Logitech QWERTY Game Mouse... \$22/15	Antec Case Master 680W Silent Pure Power Supply... \$49/59
	5.1 PC-FireWire/USB2.0 Audio 10in(1) 1429	Logitech QWERTY Game Mouse... \$22/15	Antec Case Master 680W Silent Pure Power Supply... \$49/59
	External 5.1 PC-FireWire/USB2.0 Audio 10in(1) 1429	Logitech QWERTY Game Mouse... \$22/15	Antec Case Master 680W Silent Pure Power Supply... \$49/59
	Speakers 16W/10W/Logitech 320	Logitech QWERTY Game Mouse... \$22/15	Antec Case Master 680W Silent Pure Power Supply... \$49/59
	Creative 1312/1313/1314/1315/1316/1317/1318/1319/1320/1321/1322/1323/1324/1325/1326/1327/1328/1329/1330/1331/1332/1333/1334/1335/1336/1337/1338/1339/1340/1341/1342/1343/1344/1345/1346/1347/1348/1349/1350/1351/1352/1353/1354/1355/1356/1357/1358/1359/1360/1361/1362/1363/1364/1365/1366/1367/1368/1369/1370/1371/1372/1373/1374/1375/1376/1377/1378/1379/1380/1381/1382/1383/1384/1385/1386/1387/1388/1389/1390/1391/1392/1393/1394/1395/1396/1397/1398/1399/1400/1401/1402/1403/1404/1405/1406/1407/1408/1409/1410/1411/1412/1413/1414/1415/1416/1417/1418/1419/1420/1421/1422/1423/1424/1425/1426/1427/1428/1429/1430/1431/1432/1433/1434/1435/1436/1437/1438/1439/1440/1441/1442/1443/1444/1445/1446/1447/1448/1449/1450/1451/1452/1453/1454/1455/1456/1457/1458/1459/1460/1461/1462/1463/1464/1465/1466/1467/1468/1469/1470/1471/1472/1473/1474/1475/1476/1477/1478/1479/1480/1481/1482/1483/1484/1485/1486/1487/1488/1489/1490/1491/1492/1493/1494/1495/1496/1497/1498/1499/1500/1501/1502/1503/1504/1505/1506/1507/1508/1509/1510/1511/1512/1513/1514/1515/1516/1517/1518/1519/1520/1521/1522/1523/1524/1525/1526/1527/1528/1529/1530/1531/1532/1533/1534/1535/1536/1537/1538/1539/1540/1541/1542/1543/1544/1545/1546/1547/1548/1549/1550/1551/1552/1553/1554/1555/1556/1557/1558/1559/1560/1561/1562/1563/1564/1565/1566/1567/1568/1569/1570/1571/1572/1573/1574/1575/1576/1577/1578/1579/1580/1581/1582/1583/1584/1585/1586/1587/1588/1589/1590/1591/1592/1593/1594/1595/1596/1597/1598/1599/1600/1601/1602/1603/1604/1605/1606/1607/1608/1609/1610/1611/1612/1613/1614/1615/1616/1617/1618/1619/1620/1621/1622/1623/1624/1625/1626/1627/1628/1629/1630/1631/1632/1633/1634/1635/1636/1637/1638/1639/1640/1641/1642/1643/1644/1645/1646/1647/1648/1649/1650/1651/1652/1653/1654/1655/1656/1657/1658/1659/1660/1661/1662/1663/1664/1665/1666/1667/1668/1669/1670/1671/1672/1673/1674/1675/1676/1677/1678/1679/1680/1681/1682/1683/1684/1685/1686/1687/1688/1689/1690/1691/1692/1693/1694/1695/1696/1697/1698/1699/1700/1701/1702/1703/1704/1705/1706/1707/1708/1709/1710/1711/1712/1713/1714/1715/1716/1717/1718/1719/1720/1721/1722/1723/1724/1725/1726/1727/1728/1729/1730/1731/1732/1733/1734/1735/1736/1737/1738/1739/1740/1741/1742/1743/1744/1745/1746/1747/1748/1749/1750/1751/1752/1753/1754/1755/1756/1757/1758/1759/1760/1761/1762/1763/1764/1765/1766/1767/1768/1769/1770/1771/1772/1773/1774/1775/1776/1777/1778/1779/1780/1781/1782/1783/1784/1785/1786/1787/1788/1789/1790/1791/1792/1793/1794/1795/1796/1797/1798/1799/1800/1801/1802/1803/1804/1805/1806/1807/1808/1809/1810/1811/1812/1813/1814/1815/1816/1817/1818/1819/1820/1821/1822/1823/1824/1825/1826/1827/1828/1829/1830/1831/1832/1833/1834/1835/1836/1837/1838/1839/1840/1841/1842/1843/1844/1845/1846/1847/1848/1849/1850/1851/1852/1853/1854/1855/1856/1857/1858/1859/1860/1861/1862/1863/1864/1865/1866/1867/1868/1869/1870/1871/1872/1873/1874/1875/1876/1877/1878/1879/1880/1881/1882/1883/1884/1885/1886/1887/1888/1889/1890/1891/1892/1893/1894/1895/1896/1897/1898/1899/1900/1901/1902/1903/1904/1905/1906/1907/1908/1909/1910/1911/1912/1913/1914/1915/1916/1917/1918/1919/1920/1921/1922/1923/1924/1925/1926/1927/1928/1929/1930/1931/1932/1933/1934/1935/1936/1937/1938/1939/1940/1941/1942/1943/1944/1945/1946/1947/1948/1949/1950/1951/1952/1953/1954/1955/1956/1957/1958/1959/1960/1961/1962/1963/1964/1965/1966/1967/1968/1969/1970/1971/1972/1973/1974/1975/1976/1977/1978/1979/1980/1981/1982/1983/1984/1985/1986/1987/1988/1989/1990/1991/1992/1993/1994/1995/1996/1997/1998/1999/2000/2001/2002/2003/2004/2005/2006/2007/2008/2009/2010/2011/2012/2013/2014/2015/2016/2017/2018/2019/2020/2021/2022/2023/2024/2025/2026/2027/2028/2029/2030/2031/2032/2033/2034/2035/2036/2037/2038/2039/2040/2041/2042/2043/2044/2045/2046/2047/2048/2049/2050/2051/2052/2053/2054/2055/2056/2057/2058/2059/2060/2061/2062/2063/2064/2065/2066/2067/2068/2069/2070/2071/2072/2073/2074/2075/2076/2077/2078/2079/2080/2081/2082/2083/2084/2085/2086/2087/2088/2089/2090/2091/2092/2093/2094/2095/2096/2097/2098/2099/2100/2101/2102/2103/2104/2105/2106/2107/2108/2109/2110/2111/2112/2113/2114/2115/2116/2117/2118/2119/2120/2121/2122/2123/2124/2125/2126/2127/2128/2129/2130/2131/2132/2133/2134/2135/2136/2137/2138/2139/2140/2141/2142/2143/2144/2145/2146/2147/2148/2149/2150/2151/2152/2153/2154/2155/2156/2157/2158/2159/2160/2161/2162/2163/2164/2165/2166/2167/2168/2169/2170/2171/2172/2173/2174/2175/2176/2177/2178/2179/2180/2181/2182/2183/2184/2185/2186/2187/2188/2189/2190/2191/2192/2193/2194/2195/2196/2197/2198/2199/2200/2201/2202/2203/2204/2205/2206/2207/2208/2209/2210/2211/2212/2213/2214/2215/2216/2217/2218/2219/2220/2221/2222/2223/2224/2225/2226/2227/2228/2229/2230/2231/2232/2233/2234/2235/2236/2237/2238/2239/2240/2241/2242/2243/2244/2245/2246/2247/2248/2249/2250/2251/2252/2253/2254/2255/2256/2257/2258/2259/2260/2261/2262/2263/2264/2265/2266/2267/2268/2269/2270/2271/2272/2273/2274/2275/2276/2277/2278/2279/2280/2281/2282/2283/2284/2285/2286/2287/2288/2289/2290/2291/2292/2293/2294/2295/2296/2297/2298/2299/2300/2301/2302/2303/2304/2305/2306/2307/2308/2309/2310/2311/2312/2313/2314/2315/2316/2317/2318/2319/2320/2321/2322/2323/2324/2325/2326/2327/2328/2329/2330/2331/2332/2333/2334/2335/2336/2337/2338/2339/2340/2341/2342/2343/2344/2345/2346/2347/2348/2349/2350/2351/2352/2353/2354/2355/2356/2357/2358/2359/2360/2361/2362/2363/2364/2365/2366/2367/2368/2369/2370/2371/2372/2373/2374/2375/2376/2377/2378/2379/2380/2381/2382/2383/2384/2385/2386/2387/2388/2389/2390/2391/2392/2393/2394/2395/2396/2397/2398/2399/2400/2401/2402/2403/2404/2405/2406/2407/2408/2409/2410/2411/2412/2413/2414/2415/2416/2417/2418/2419/2420/2421/2422/2423/2424/2425/2426/2427/2428/2429/2430/2431/2432/2433/2434/2435/2436/2437/2438/2439/2440/2441/2442/2443/2444/2445/2446/2447/2448/2449/2450/2451/2452/2453/2454/2455/2456/2457/2458/2459/2460/2461/2462/2463/2464/2465/2466/2467/2468/2469/2470/2471/2472/2473/2474/2475/2476/2477/2478/2479/2480/2481/2482/2483/2484/2485/2486/2487/2488/2489/2490/2491/2492/2493/2494/2495/2496/2497/2498/2499/2500/2501/2502/2503/2504/2505/2506/2507/2508/2509/2510/2511/2512/2513/2514/2515/2516/2517/2518/2519/2520/2521/2522/2523/2524/2525/2526/2527/2528/2529/2530/2531/2532/2533/2534/2535/2536/2537/2538/2539/2540/2541/2542/2543/2544/2545/2546/2547/2548/2549/2550/2551/2552/2553/2554/2555/2556/2557/2558/2559/2560/2561/2562/2563/2564/2565/2566/2567/2568/2569/2570/2571/2572/2573/2574/2575/2576/2577/2578/2579/2580/2581/2582/2583/2584/2585/2586/2587/2588/2589/2590/2591/2592		

80,000 nanometres thick]. HD-DVD lasers aren't even the same color as DVD lasers. The blue-violet HD-DVD beam is not only hipper than its red DVD equivalent, it also has a shorter wavelength so it can hit a more precise spot.

Outwardly, Blu-ray discs may look the same as DVDs and HD-DVDs, but they are most definitely not. Rather than sandwiching the data halfway

between two polycarbonate layers, Blu-ray keeps it up top, like a CD. The grooves are just .32 microns vs. HD-DVD's .40, making the precision of the laser that much more critical. Accordingly, although the Blu-ray lens is also blue-violet, its numerical aperture is higher than HD-DVD's (.85 versus .65) in order to read and translate the much finer details.



MEMORY-TECH

**HD DVD INLINE
INSPECTION MACHINE**

Due to its state of miniaturization and stringent manufacturing and operational requirements, Blu-ray has experienced considerably more birthing pains than its high-def counterpart. Indeed, the syndrome of "disc tilt," wherein even the most delicate warp or mechanical misalignment can cause misreads, is the primary reason Blu-ray carries its data on the top, closer to the laser's lens. Yet even the implementation of that concept caused problems, as raising the data layer also moved it that much closer to potential fingerprints and scratches. Fortunately, the early notion of a bulky, disc-loaded cartridge was ultimately scrapped in favour of a specially-designed, ultra-thin 0.1mm protective polymer finalized in 2005.

The most obvious advantage to the more intricate Blu-ray disc is its capacity, nearly double that of HD-DVD at 25 GB per layer. A double-layer Blu-ray disc can house 50 GB of

INCREDIBLE ELECTRONICS (Wholesale)

Canada's LARGEST FTA Distributor. 40,000 Systems in Stock!
YOU MUST BRING THIS AD TO RECEIVE THESE SPECIAL PRICES

 \$99.⁹⁹ ARIZA 800S W/FREE SWITCH OR CABLE	 1000FT UL/RC6 \$74.⁹⁹ Quad-Shielded FT4 Cable	 1000FT CAT6 \$74.⁹⁹ Gigabit 24AWG Cable	 1000FT RG59 \$99.⁹⁹ FT4/UL Rated Cable	 \$79.⁹⁹ ARIZA 700 W/FREE SWITCH OR CABLE
 W/ Dual LNB 18" DISH \$24.⁹⁹ WITH ANY RECEIVER PURCHASE	 W/2 Dual LNB ELLIPTICAL DISH \$49.⁹⁹ WITH ANY RECEIVER PURCHASE	 DSS LNB \$19.⁹⁹	YOU GET 2 18" DISH W/ DSS & 2 4 WAY DISC/ SWITCH  \$59.⁹⁹	 33" DISH \$29.⁹⁹ 39" DISH \$49.⁹⁹
INSTALL KITS EVERYTHING YOU NEED TO INSTALL A SATELLITE DISH \$14.⁹⁹	 \$4.⁹⁹ 110/119 BRACKET WITH ANY DSS LNB PURCHASE	 \$9.⁹⁹ SATFINDER KIT \$19.99	*ORIGINAL AND COMPATIBLE REMOTES *ARIZA - PANSAT - FORTEC - * DISHNET - \$9.⁹⁹ AND UP	Quad LNB Holder for Elliptical Dish  \$14.⁹⁹

Coast to Coast Locations! (DEALERS WELCOME) Authorized Ariza® Distributor. We Accept Cash, Credit Card and Debit.
Prices subject to change at any time - All Prior Sales Excluded - While Quantities Last - Some products may not be available at all locations - Products not exactly as shown - FROE-

Vancouver 1850 Hartley Ave. Unit 8, Coquitlam BC V3K 7A1 604-777-4430 OPEN SATURDAY M-F 8:30-5:30 Sat 10-3	Toronto West 5391 Ambler Dr. Unit 1 Mississauga ON L4W 1K1 (905) 206-1332 OPEN SATURDAY Mon - Fri 9-6 Sat 10-4 SUNDAY 12-5	Toronto East 1286 Kennedy Rd. Unit 3 Scarborough ON M1P 2N5 (416) 295-8484 OPEN SATURDAY Mon - Fri 10-6 Sat 10-4	Calgary 6518 1A ST SW Calgary AB T2N 0B8 403-259-3313 OPEN SATURDAY Mon - Fri 9-6 Sat 12-3
--	--	--	--

data and, with a little tweaking, future quadruple-layer models could squeeze a colossal 300 GB into their tiny frames. The Sony-developed technology is no lightweight in the endorsement department either, backed by giants such as Pioneer, Apple, Disney and Fox.

So, which is best for you? The popular early opinion amongst super-high-definition (1080p) movie fans is that the picture quality is essentially equal. Blu-ray has a theoretically faster bit rate (54 Mbps vs. 36.55 for HD-DVD), yet it is clearly the more expensive option – currently – though it does offer higher capacity discs.

One thing is certain – the two technologies are not compatible with one another. Thus, consumers are put in the ugly position of denying themselves some of what they really want just because they opted to go the other route.

Yet even more frustrating – particularly for backers of the technologies – is the approach of an entirely different technology, holographic storage. Utilizing not one but two laser beams and a process that stores and reads data three-dimensionally throughout the entire width – not just a 2D surface – of the medium, holographic storage offers disc capacities of 300 GB at product launch, and theoretical capabilities of one, two or more terabytes (one terabyte = 1000 GB) perhaps by the end of the decade. Potential data transfer rates are said to approach or surpass a startling one GB per second.

Promises of holographic storage have been banded about for decades, yet the arrival of this much-hyped and long-overdue format now appears imminent. Will it render HD-DVD and Blu-ray a mere stopgap? Maybe, but then, what isn't in these fast-moving times?

By Gord Goble

First Glance

How we bank

We don't physically visit our bank branches like we used to, according to Toronto-based market research firm, TNS Canadian Facts. In announcing its latest study called How Canadians Bank, TNS notes that "just over half of Canadian adults (53%) reported visiting a branch in the month prior to the survey, the lowest level of branch banking reported since the study began in 1994."

Canadians were early adopters of automated banking machines, so it's not too surprising that TNS saw only modest growth here: within its study period 81 percent of adults used a bank machine in 2006 compared to 78 percent during a similar period in 2005.

Likewise, online banking was up slightly: 37 percent of adults banked online during the research period, compared to 34 percent in 2005. TNS says that 60 percent of Canadians with Internet access have signed up for online banking.

Other findings reported by TNS

- Over half of bill payments, account transfers and account balance enquiries are conducted online.
- 90 percent of withdrawals are made at a bank machine.
- Deposits at bank machines outnumber in-branch deposits by two to one.
- Canadians still prefer face to face [rather than phone or online interactions] for RSP contributions, to set up new accounts or negotiate mortgages.



#4-555 North Road, Coquitlam Tel: 604 931-5809

Mon-Fri: 11:00-18:30
Sat: 10:30-17:00
Sun: Closed
Fax: 604 931-5891

AMD SEMPRON 2800
MSI K8VM3-V MB
512MB DDR400 RAM
Video/Lan/Sound
80GB 7200rpm HD
17" ATX Tower W/350w USB
18X DVD Writer

AMD Athlon 64 3800
MSI K9VGM-V MB
512MB DDR2 667 RAM
Video/Lan/Sound
80 GB 7200rpm HD
17" ATX Tower W/350w USB
18X DVD Writer

AMD Athlon Dualcore 3800
ASUS M2NPV-VM MB
1024MB DDR2 667 RAM
NVIDIA 6150 VIDEO CARD
250GB 7200rpm HD
18" ATX Tower W/350w
18X DVD Writer

AMD Athlon Dualcore 4600
Asus M2N4-SLI MB
2GB DDR2 667 RAM
NVIDIA 7900GS 256MB
250GB 7200rpm HD
18" ATX Tower W/430w USB
18X DVD Writer

MONTHLY SPECIAL
External Hard Drive 250G \$99
Zalman 5.1 headphone \$59
Logitech X-530 5.1 Speaker \$69
2SET Game Pad \$19
PC WEBCAM \$19
USB Bluetooth \$19
MINI Wireless MOUSE \$16
NOTEBOOK USB LIGHT \$6

Super Deal-1 \$299

Super Deal-2 \$399

Super Deal-3 \$599

Super Deal-4 \$999

All listed prices reflected 3% cash discounted. System warranty: 1 year parts & 3 years labour

Intel Celeron 2.8GHZ
MSI PM8PM-V MB
512MB DDR2 667 RAM
Video/Lan/Sound
80GB 7200rpm HD
17" ATX Tower W/350w USB
16X DVD-ROM

Intel P4 680IT 3.0GHZ
MSI PM8PM-V MB
1024MB DDR2 667 RAM
Video/Lan/Sound
80GB 7200rpm HD
17" ATX Tower W/350w USB
18X DVD Writer

Intel CORE 2 DUAL E6300
INTEL D946GZIS MB
1G DDR2 667 RAM
OINTEL X3000VIDEO CARD
160GB 7200rpm HD
18" ATX Tower/350W
18X DVD Writer

Intel CORE 2 DUAL E6400
ASUS P5B MB
1GB DDR2 667 RAM
NVIDIA 7600GT 256MB
250GB 7200rpm HD
18" ATX Tower W/430w USB
18X DVD Writer

Video Card
PCI-E
GEFORCE 6200 128MB \$59
GEFORCE 7300GS 256MB \$99
GEFORCE 7600GS 256MB \$139
GEFORCE 7600GT 256MB \$159
GEFORCE 7900GS 256MB \$219
GEFORCE 7950GT 512MB \$329
GEFORCE 8800GT 640MB \$369
GEFORCE 8800GTX 768MB \$689
AGP
ATI RADEON 9250 128MB \$45
ATI RADEON 9550 256MB \$79
ATI RADEON X1300 256MB \$109
ATI RADEON X1600 PRO 256MB \$139
ATI RADEON X8500 PRO 256MB \$199
ASUS N6600 512MB \$229

Super Deal-5 \$299

Super Deal-6 \$399

Super Deal-7 \$649

Super Deal-8 \$999

CD/DVD Drive
LG CD-ROM
LG 16X DVD-ROM
LG 52X32X52 CD-Writer
LG H42N DVD-RW 18X
LG H22L DVD-RW 18X LS
Pioneer PX-760A
Pioneer DVR-111D
CD-R/DVD-R 50P
CD-RW/DVD-RW
DVD CASE

Networking
\$15 56K V.92 Modem
\$25 10/100 NIC
\$29 5/8 Ports Switch
\$39 USB/Pcmcia NIC
\$49 DLink DI-604 4 Port Router
\$129 DLink DI-524 Wireless Router
\$39 Linksys Wireless Router
\$18/\$19 MSI PCI Wireless 11G
\$1.5/\$2.5 MSI USB Wireless 11G
\$0.5 PCMCIA WIRELESS 11G

Sound Card
\$20 6 CH SOUND CARD
\$15 Creative Audigy SE
\$26/\$39 Creative Audigy4 SE
\$19/\$29 Creative Audigy2 ZS
\$45 Creative P580 Speaker
\$49 Creative P7800 Speaker
\$69 Logitech R-20 Speaker
\$39 Logitech X-230 Speaker
\$39 Logitech X-530 8.1 Speaker
\$35 USB SOUND CARD

Hard Drive
\$18 80/160 ATA
\$35 260/320 ATA
\$59 80/160 SATA
\$79 250/320 SATA
\$79 40/80/100GB NB
\$109 512MB/1G/2G
\$29 2.5"/3.5" Enclosure USB
\$49 3.5" Enclosure USB+1394
\$69 3.5" LAN DRIVE
\$25 3.5" ONE BUTTON BACKUP

ACCESSORIES
\$53/\$69 USB SERIAL ADAPTER
\$83/\$119 USB PRINTER PORT
\$54/\$70 USB MAGIC KIT
\$84/\$120 USB BLUETOOTH
\$69/\$99/\$119 USB INFRA-RED
\$19/\$29/\$49 USB 4 PORT HUB
\$19 USB CARD READER
\$59 USB FLOPPY DRIVE
\$99 PCI-USB 2.0
\$29 PCI-SERIAL 2PORT

Word tables that calculate

While Excel is the obvious program of choice for math calculations, sometimes you'll need small calculations in Word. Word tables include a feature that lets you create formulas to make simple calculations on table

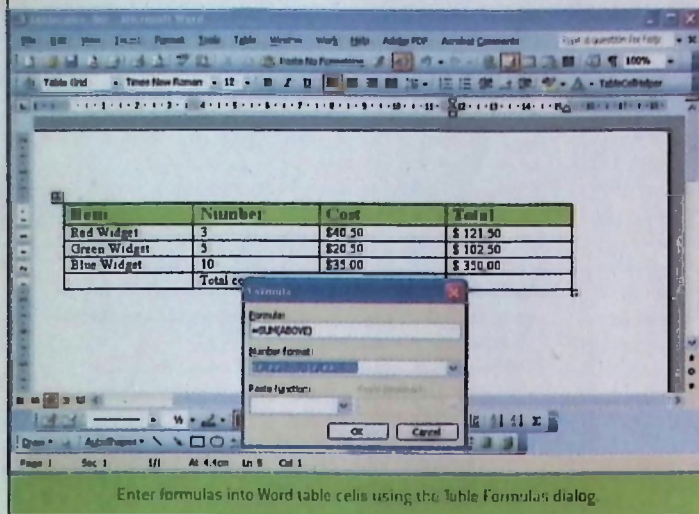
data. So you can, for example, use tables to lay out an invoice and then calculate the row and column totals with formulas.

Start by creating a table in your document using Insert, Table and set it to the number of columns you need. You can add more rows later by pressing Tab in the cell in the bottom right of the table. To make a calculation using table data, you need to know the table cell references. Cells are named using the column letter and row number – so the top left cell is called A1, the cell below it is A2 and the cell to its right is B1 etc.

To perform simple addition – such as adding the values in cell B3 and C3, click in the cell to contain the answer and choose Table, Formula. Type =B3+C3 in the Formula area, select the desired number format from the Number format list and click Ok.

You must enter formulas using the Table, Format dialog – you can't simply type them directly into the cell as you would in Excel, for example. Table formulas are Word fields and you can see the field code that underlies a formula by clicking on the formula and pressing Shift + F9.

There are some built-in formulas that you can use and one of these sums a column of numbers. To use this, click in the cell to contain the result and choose Table, Formula.



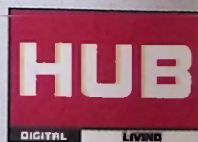
Item	Number	Cost	Total
Red Widget	3	\$40.50	\$121.50
Green Widget	3	\$20.50	\$102.50
Blue Widget	10	\$35.00	\$350.00
Total cost			

Table Formula dialog box:
Formula: =SUM(ABOVE)
Number format: \$121.50
Paste function: [dropdown]
Buttons: OK, Cancel

Enter formulas into Word table cells using the Table Formulas dialog.

www.hubcanada.com

for the latest news on Digital Living



Type =sum[above] to add together the values in the table cells above this cell.

If you're familiar with field codes, you can write formulas as field codes. To do this, click in the cell to contain the formula and press Control + F9 to add the field code braces. Type the formula between these braces, for example, type =B3+C3 \# "##0.00" will sum the values in cells B3 and C3 and format them as numbers showing two decimal places. When you're done, press Shift + F9 to see the result in the cell.

Word formulas don't recalculate automatically, so you must recalculate them if you change any number they refer to. To do this, click the formula and press F9. You'll use this again when a cell contains an error message – after you've fixed the problem, press F9 to recalculate and remove the error.

If you have trouble determining each cell's reference, you can use a macro that was previously shipped with Word 97 to help. This macro isn't included in later versions of Word, but you can still find and use it. Visit <http://support.microsoft.com/kb/q172492/> and download the file Wdtlupd.exe from the link on this page.

This is a self-extracting zip file that includes a number of documents, not all of which will be compatible with later versions of Word – however, the one we'll use is compatible. Double click to run this file and select a location to save the extracted files. Open this folder and double click the file macros8.dot to open it in Word. If you're prompted to do so, click the Enable Macros button (to control macro security settings choose Tools, Macro, Security). With the file open, choose Tools, Macros, Visual Basic Editor and locate the Macros8.dot file in the Project list on the left of the screen. Click it to open it and locate the module called TableCellHelper. Double click this to open it and highlight all the macro code. Choose Edit, Copy.

Locate the file Normal in the same Project collection and click its

Modules collection. Choose Insert, Module to add a new module and double click the module to open it. Click inside the code box and choose Edit, Paste to paste the copied code. In the Properties area (display it by choosing View, Properties Window), change the module name (which will read something like Module1) to TableCellHelper. Close the Visual Basic editor and close the Macro8 document.

This macro will be easier to use if you add it to a toolbar button. To do this, right click any toolbar and choose Customize, Commands tab. From the Categories list, choose Macros and locate and drag the macro TableCellHelper onto the toolbar. Right click it and give it a shorter name. Close the Customize dialog. In the future, to find a table cell reference, click in the cell and click the macro button on the toolbar – you'll see listed in the dialog the table cell name and the number of rows and columns in the table.

By Helen Bradley

Web hosting and design FROM 6⁹⁵
outstanding customer support

Call us toll free: 1 877 356 7638

www.EasyWebhosting.ca

ASPx, PHP, PERL, CGI, MySQL, MSSQL

eCommerce, credit card processing web site builder

Shopping Cart, Spam filter with real-time quarantine access

www.DataRecoveryPro.com

Retrieve Data From Crashed Drive

Data Recovery for data Loss caused by fires, water, power surges, partition, format, corruption. From : Laptops, DeskTops, Removables, SAN/NAS, RAID, DVD, CD, Tape, Zip, Floppy. OS : Windows, Mac, Linux, Unix



Forensic service

Tel: (604) 608-6178

Toll Free: 1-888-688-5588

Info@datarecoverypro.com

Suite 1000- 355 Burrard St Vancouver
BC. V6C 2G8 (Marine Building, Downtown)

1stDataRecovery.com

Dead Drive Cleanroom Service \$500⁰⁰

From dead, deleted, formatted, fdisked, corrupted, virus infected, passworded, CD, water & fire damaged, overwritten, inaccessible devices: hard drive, raid, zip, DVD, Removable, optical, flash memory, tape, audio / digital image files ...

Forensic service

16 Years of Quality Service

Windows / Mac / Unix / NetWare

Data back in as little as 24 hrs.

(604) 681-3770 Toll Free: 1-877-460-3670

Business hours: M-F: 9:30am-5pm



1050 W. Pender St. Suite 745, Vancouver, BC V6E 3S7

Info@1stDataRecovery.com www.1stDataRecovery.com

2957 Kingsway Vancouver BC V5R 5J4 (West of Rupert St.)
Tel/Fax: 604-439-1588 E-mail: webmaster@starelectronics.ca
www.starelectronics.ca

Business hours: Mon. to Sat. 10:30am-6pm

REPAIRS: LAPTOPS, APPLES, LCD

- **REPAIR:** Top skilled component level technicians repair Laptop, Apple, Desktop hardware & software. We also repair LCD CRT monitor, projector, LCD TV, PLASMA TV, DLP TV & all other electronics
- **SALES:** New & used computers, parts, electronics and accessories
- **TRADE IN & RECYCLE:** Used computers, TVs and other miscellaneous electronics
- **ENGINEERING:** Computer network, audio & video engineering

Your one stop solution for all your Computers & Electronics Needs.

ALL PRICES CAN BE BEAT!

Big Computer Swap Meets

SATURDAY

March 17th, April 14th & May 12th 11:00 am-4:00 pm

Croatian Cultural Centre, 3250 Commercial Drive, Van., BC

Bargains, Deals, Fun, Great Prices, Expert Advice
www.geocities.com/turnbuckle99

ADMISSION:

Adults \$3.00 Kids Under 12 Free,

Family Rate: \$9.00 (4 members)

For Table Reservations and More info:

Phone: 604-521-6304 Email: funpromo@shaw.ca

Online Video Communities

Passports to other worlds

Today's online communities are like foreign countries - they do things differently there.

Online communities have different interests, different vocabularies, sometimes different technologies. They bring people together by interest, not necessarily by geography, and they sometimes offer experiences your eyes and ears will just not believe!

New tools for building online communities are coming fast and furious, as these new "countries" strive to thrive. Userplane, for example, offers a collection of cross-platform tools, including multi-user text/voice/video chat or instant messaging; voice and video recording capability; content archiving and user search tools. Userplane underpins much of the so-called user-generated functionality of the new Web 2.0 social networking environment.

Talkshoe-enabled websites or hosted services allow not only for user-generated content contributions, but also for live, two-way chat and voice over Internet [VoIP] enabled environments, much like talk radio but for online communities. As many as a thousand voices can join in a live "Talkcast," and the event can be recorded and podcast later on, helping to build an even larger online community.

Some online communities have populations in the millions, filled by 'Netizens who connect and disperse with a change in the wind and a click of the mouse. Other sites are very info-centric communities, with much smaller audiences connecting for specific shared interests. Travelvoyer.com or zoomandgo.com are crowded places for the travel and tourism crowd. JamHub.ca is populated by jam band fans and their musical creations. MyCitySkates.com is an online world dedicated to skateboard culture.

Still in beta at press time (imagine that - a country in beta version!), blogtv.ca is connecting web-enabled Canadians in specific communities of interest, be they fans of Henry Rollins to teens afflicted by diabetes.

blogtv.ca is specifically for Canadians: using special geo-blocking techniques, access is limited geographically [otherwise, open an account and you're in]. You can generate content via live web-cam video, online chat and audience polling, as well as archived and searchable materials. An internal monitoring process is in place to keep things above board. [The site is managed through Alliance Atlantis, the big media company.]

Online communities are older than you might think. At Epress.ca, a peak

million views a month have been recorded since its founding in 1998. Citizenship here is a little more demanding - the Epress submission page calls for videos that are "honest, well-researched, timely, distinctive" - and most interestingly, "watchable."

Finding the right country to visit, the right community to join and the right online video to watch is getting a little trickier as the online population grows and the site scene gets more crowded. Dedicated search sites like Clipblast! and SearchforVideo are just two of the many online directories and aggregation sites that can be used to help find your desired destination. ClipBlast! uses what it calls "the Web's largest video search index and pioneering patent-pending technologies" for its online experience (how's that for flag-waving?) that allows users to search, watch, share and save the videos they see as most interesting or more relevant. Users can search for video from within a portal, a single site, a specific vlog or on across the entire Web.

SearchforVideo.com categorizes user-generated videos and community content into categories and channels that can be searched in real-time. Users can link to the larger community via RSS feeds, a type of subscription service that can be used to either distribute or find videos by specific content, topic or interest.

Not as well specified are questions about the ownership, rights and compensation for user-generated video, and by extension other types of content submissions. Legal eagles are still exploring the ramifications of hosted video material that is deemed libelous or obscene, jostling over who controls material rights, and debating who may benefit from exhibition or distribution. Author's monopoly, copyright protection, intellectual property, corporate or state censorship - whatever it's called now, there will probably be new concepts and new terms to describe online rights, protections and responsibilities tomorrow.

Submissions to some sites are blanketed by an agreement that grants the host "a royalty-free, perpetual, non-exclusive, unrestricted, worldwide license to: use, copy, sublicense, adapt, transmit, publicly perform or display" any contributions - especially video - it gets.

On the other hand, some online communities let you specify a purchase and/or rental price for uploaded video. Part of the specified price goes to the content owner, the rest is charged as a service fee by the hosting website itself.

A less commercial approach comes with a Creative Commons Public

Remember

7n8.com

Whenever you need a Website or eCommerce Solution

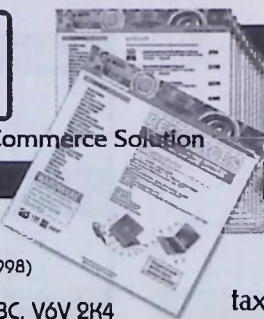
Visit **www.7n8.com**

Call 604-628-1988

A business of Tchever Development Inc. (since 1998)

Member of Richmond Chamber of Commerce

363A - 13988 Cambie Road, Richmond, BC, V6V 2K4



We build Website

Online catalog, online store
online wholesale system

You can manage online

Web contents, products, orders
customers, payment, shipping
tax, promotions and design layout

Domain License, stipulating video submissions are "dedicated" to the public domain, and are therefore freely and openly available.

Nevertheless, each video you upload and every clip you watch online is an act of citizenship in a new online world. Today's online community of interest is symbolized by content and context as much as any piece of fabric fluttering in the breeze.

By Lee Rickwood

Lee Rickwood is a freelance writer and independent video producer. He can be reached at videodaze@goodmedia.com.

A sampling of online video communities sites:

www.blogtv.ca
www.bubbleshare.com
www.clipblast.com
www.dabble.com
www.digg.com/videos
www.funlittlemovies.com
www.jamhub.ca
www.livevideo.com/country
www.mycityskates.com

www.myspace.com
www.ohmynews.com
www.pixpo.com
www.searchforvideo.com
www.singingfish.com
www.stickam.com
www.travelvogueur.com
www.vecker.com
www.zoomandgo.com

A-Linx Computer

www.alinx.ca (604)592-5388 or 89

*****Visit Our Website For More Special Notebooks, Parts, Software Price*****

Parts:

Transcend 2GB USB2.0 Flash Drive(Lifetime).....\$35
Adaptec Game Bridge.....\$39
Seagate 320GB IDE Hard Drive(5yr Warranty).....\$115
EVGA GF7950 GT-KO 512MB Video Card.....\$319
Logitech wireless KB & Optical Mouse Combo.....\$39
LG GSA-H42N 18X DVD+-RW Drive.....\$37
Acer 1916WAB 19 inch 5ms LCD.....\$215
Norton Antivirus 2007 1year OEM.....\$27
MS VISTA Home Basic/Premium.....\$119/\$145

AMD Econ System

Sempron 2800+ CPU
MSI K8MM-V 8XUSB2.0
512MB PC3200 DDR400(Samsung)
160GB 7200rpm SATA2 HD
LG 52x32x52 CD-RW Drive
3D Graphic Card,audio,10/100Lan, 2XSATA
18" 400W & 2XUSB Tower Case
PS/2 Optical Wheel Mouse & Keyboard
GS-693 Multimedia Speakers **\$279**

Special Upgrade
CD-RW to 18X DVD+-RW
and Sony 1.44 Floppy Drives
Only +\$23

Intel Celeron System

Celeron 64Bit D352-3.2 Ghz CPU
ECS P4M800Pro-M 8XUSB2.0
512MB PC5400 DDR2(Samsung)
160GB 7200rpm SATA2 HD
LG 52x32x52 CD-RW Drive
3D Graphic Card,audio,10/100Lan, 2XSATA
18" 400W & 2XUSB Tower Case
PS/2 Optical Wheel Mouse & Keyboard
GS-693 Multimedia Speakers **\$299**

Acer As9300 Laptop

Acer AS9300-3699 Notebook
AMD Turion64 MK-36 2.0GB CPU
512MB DDR2 Memory
17 Inch WXGA with Crystal Bright
120GB HD, DVD+-RW Drive
Gigabit Lan, wireless 802.11b/g
56K Modem, 5 in 1 Card Reader
Windows VISTA Home
1 Year Warranty



\$799

AMD Power System

Athlon64 3500+CPU AM2
ASUS M2V-TVM 8xUSB2.0
1GB PC5400 DDR2 (Samsung)
WD 250GB 7200rpm SATA II HD
12-in-1 Internal Card Reader
Integrated VIA DeltaChrome GPU
Max. 256MB Shared Memory
ALC655 6-Channel 3D Audio(0.8)
10/100 Lan, Serial ATA II(0.8)
LG 18X Dual Layer DVD+-RW Drive
18" 450W & 2XUSB Front Tower Case
Logitech Internet Pro Keyboard
Logitech Optical Wheel Mouse
Edifier M1300 2.1 Speakers System
w/Wooden Subwoofer



\$499

AMD Power System

Athlon64x2 Dual Core 3800+
ASUS M2N4-SLI 10xUSB2.0
1GB PC5400 DDR2 (Kingston)
Seagate 250GB-16MB SATA II HD
12-in-1 Internal Card Reader
ATI X1600Pro 512MB DDR2
16XPCI-E, TV Out, DVI Video Card
Realtek ALC850 6-Channel Audio(0.8)
Gigabit Lan, 6XSerial ATA II(0.8)
LG 18X Dual Layer DVD+-RW Drive
18" Dual Fan 450W & 2XUSB Front Case
Logitech Cordless Internet Pro Desktop
Keyboard and Optical Wheel Mouse
Edifier M1300 2.1 Speakers System
w/Wooden Subwoofer



\$749

AMD Super+ System

Athlon64x2 Dual Core 4200+
ASUS M2N-E SLI 8xUSB2.0
1GB PC6400 DDR2-800(Transcend)
Seagate 320GB-16MB SATA II HD
Black 12-in-1 Internal Card Reader
*EVGA Geforce GF7950GT KO-512MB
DDR3 16XPCI-E, 2XDVI Video Card
C-Media Superior Quality 7.1-Ch Audio(0.8)
Gigabit Lan,6XSerial ATA II,2XIEEE1394(0.8)
*LG (Light Scribe)18X DVD+-RW Drive
*Antec Sonata II Black 450W Case
Logitech Coreless Internet Pro Desktop
Keyboard and Optical Wheel Mouse
Edifier M1500 5.1 Speakers System
w/Wooden Subwoofer



\$1129

P4 Value System

P4 D820 2.8GHz Dual Core CPU
ASUS P5VDC-MX 8xUSB2.0
512MB PC5400 DDR2(Samsung)
WD 160GB 7200rpm SATA II HD
12-In-1 Internal Card Reader
S3 Graphics Unichrome Pro
Integrated Graphics core
Realtek ALC653 6-channel Sound
10/100 Lan,4XSerial ATA(0.8)
LG 18X Dual Layer DVD+-RW Drive
18" P4 400W & 2XUSB Front Tower Case
Logitech Value Keyboard and
Logitech Optical Wheel Mouse
Edifier R10 Multimedia Speakers
System



\$425

P4 D925/D935 Dual Core \$465/\$505

P4 Power System

P4 D925 3.0GHz Dual Core CPU
ASUS P5L-MX 945G 8xUSB2.0
1GB PC5400 DDR2 (Samsung)
WD 250GB 7200rpm SATA II HD
12-in-1 Internal Card Reader
Intel Graphics Media Accelerator 950
Azalia ADI1986A, 6-channel High-Definition Audio CODEC(0.8)
Gigabit Lan, 4XSerial ATA II(0.8)
LG 18X Dual Layer DVD+-RW Drive
18" P4 450W & 2XUSB Front Tower Case
Logitech Value Keyboard and
Logitech Optical Wheel Mouse
Edifier M1300 2.1 Speakers System
w/Wooden Subwoofer



\$559

P4 D930 Dual Core AMB \$599
Core 2 Duo E6300/E6400 \$649/\$699

P4 Super System

Intel Core 2 Dual E6300CPU
ASUS P5LD2 945P 8xUSB2.0
1GB PC5400 DDR2 (Kingston)
Seagate 250GB-16MB SATA II HD
12-in-1 Internal Card Reader
ATI X1600Pro 512MB DDR2
16XPCI-E, TV Out, DVI Video Card
Realtek 8-Channel High-Definition Audio(0.8)
Gigabit Lan,4XSerial ATA II(0.8)
LG 18X Dual Layer DVD+-RW Drive
18" P4 Dual Fan 450W & 2XUSB Front Case
Logitech Cordless Internet Pro Desktop
Keyboard and Optical Wheel Mouse
Edifier M1300 2.1 Speakers System
w/Wooden Subwoofer



\$835

Core 2 Duo E6400/E6600 \$889/\$989

P4 Super+ System

Intel Core 2 Dual E6400CPU
ASUS P5B P965 10xUSB2.0
1GB PC6400 DDR2-800(Transcend)
Seagate 320GB-16MB SATA II HD
Black 12-in-1 Internal Card Reader
*EVGA Geforce GF7900GS 256MB
DDR3 18XPCI-E, 2XDVI Video Card
ADI 8-channel High Definition Audio CODEC(0.8)
Gigabit Lan,6XSerial ATA II(0.8)
*LG (Light Scribe)18X DVD+-RW Drive
*Antec Sonata II Black 450W Case
Logitech Coreless Internet Pro Desktop
Keyboard and Optical Wheel Mouse
Edifier M1500 5.1 Speakers System
w/Wooden Subwoofer



\$1239

Core 2 Duo E6300/E6600 \$1189/\$1339

All Systems come with 1 year parts and 3 years labour hardware warranty.

First Glance

We love our digital photography

The camera industry in Canada enjoyed a banner year in 2006, with consumers buying more digital cameras and getting more images printed at commercial photofinishing outlets, according to the Canadian Imaging Trade Association (www.citacanada.ca).

CITA says its members (which include most manufacturers) shipped approximately three million digital cameras to retailers last year. This represents a 20 percent increase compared to 2005.

The digital single lens reflex sector is the hottest, with 145,000 units going to retailers in 2006, an increase of 50 percent compared to 2005. CITA says DSLR sales will continue to boom this year.

Association president Kent Hatton says that "this year we will see up to 60 percent of Canadian homes with a digital camera." People are also taking more pictures than before. Hatton says that digital camera users on average shoot about 450 images per year, the equivalent of 18.8 rolls of film. In the film days, the average was about five rolls.

Not only are people taking more pictures, they are also making more of them into prints using retail do-it-yourself kiosks or online print services – and that's not counting all the images made at home on photo inkjets. This helped slow the decline in photofinishing paper consumption. In fact, use of eight-inch or larger papers showed a growth of some 16 percent last year.

And what of film? CITA says sales film cameras "fell to insignificant levels" in 2006. It predicts that film sales will decline 34 percent in 2007 to

approximately 8.5 million rolls, from 12.9 million rolls in 2006 (which itself was a decline of 37.4 percent compared to 2005).

A recent report on Forbes.com estimated that worldwide, digital camera sales in 2006 topped US\$30.4 billion, up more than 13 percent from 2005.

In-car GPS sales explode

If double-digit growth is good, triple digit growth shows serious uptake. And that's how the in-car GPS navigation market performed in 2006, according to The NPD Group. The number of units sold in Canada is still relatively small – 106,000 units in 2006 – but that represents a 923 percent increase from the previous year. Sales volume was worth \$52.4 million, an increase of 453 percent from last year.

By comparison, in the US, unit volume increased by 128 percent during the same period, for a total of 900,400 units. Sales volume was US\$476 million.

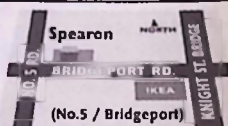
NPD says the hot brands in Canada include Tomtom, Garmin, Magellan and Mio, with Pioneer, Sony and Alpine also in the picture.



SPEARON TECHNOLOGY

Simply the BEST computer solution
Mon - Fri 10:30 ~ 19:00 Sat 11:00 ~ 18:00

202-12111 Bridgeport Rd.
Tel: 604-214-9473
sales@spearon.com
www.spearon.com



Monthly Special

Celeron 2.53GHz
DDR400 256MB
WD 80GB 7200RPM
CD-ROM
17" 350w ATX case

\$199

Intel Celeron 3.0GHz

512MB DDR Memory
LG 16X DVD Rom
80GB SATA2 Hard drive
17" 350w ATX case
Internet Keyboard
Optical Mouse
2 Multimedia speakers

\$299

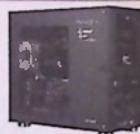
Intel Pentium4 3.0GHz

512MB DDR Memory
LG 16X DVD Rom
80GB SATA2 Hard drive
17" 350w ATX case
Internet Keyboard
Optical Mouse
2 Multimedia speakers

\$359

SPEARON TOP GAMER 5000D

INTEL Quad Core 6700 2.93GHz
Corsair DDR2 800 4GB Memory
ASUS Motherboard
LITEON Blu-Ray DVD Rewriter
Seagate 1000GB SATA2 HDD RAID0
EVGA 8800GTS Video card x 2 SLI
ZALMAN Fatal1ty Gaming case
Logitech G15 keyboard/Laser mouse
Logitech Z5450 Speaker
Windows VISTA Ultimate installed



SKU: 6024

Optional parts and extend warranty are available, please check website for details

\$4999

We Refill Ink and Toner

Start from

\$2.99



Canon, HP, Epson, Lexmark

Intel Dual Core 3.0GHz

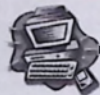
1GB DDR2 Memory
ASUS motherboard
LG dual layer DVD-Rewriter
160GB SATA2 Hard drive
17" 450w ATX case
Internet Keyboard
Optical Mouse
2 Multimedia speakers

\$499

Intel Core 2 Dual E6300

1GB DDR2 Memory
ASUS Motherboard
LG dual layer DVD-Rewriter
250GB SATA2 Hard drive
17" 450w ATX case
Internet Keyboard
Optical Mouse
2 Multimedia speakers

\$599

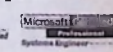
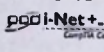


Onsite Service Available

Our certified professional technicians provide fast, reliable onsite service.
Feel free to call 604-214-9473 to get your computer problem fixed today.

Our service include:

- ✦ Internet Security, Virus and Spyware Removal
- ✦ Wired and Wireless Network setup and maintenance
- ✦ Desktop and laptop repairing, upgrading and more ...



See more computer systems and parts at www.spearon.com

Pay per view movies on your phone

How do you stuff a full-length movie in your pocket? Bell Canada lets Mobility customers download them to their phone, via its recently launched Mobile Movies service. It's pay-per-view - \$5.99 per movie on top of the phone service package. Plus you need a compatible phone, which right now in Bell's stable includes the Samsung a920, a900 and m500, Sanyo 7500 and LG 550.

Bell says the Mobile Movies software allows customers to browse movies by category, download trailers and look up other movie information like plot summaries. The playback interface looks like a DVD control panel, so from your phone you can play, pause, move forward and select chapters. Bell says new and "classic" movies are available now from the libraries of Disney's Buena Vista International TV division and Sony Pictures TV International.

Kodak cuts ink cartridge prices

Kodak is launching a new line of cost-effective inkjet printers. The best part - the ink cartridges will be sold at a ground-breaking low cost, with premium black ink cartridges priced at US\$9.99 and five-ink colour cartridges priced at US\$14.99. The worst part - we don't know if or when these printers will be available in Canada. The EasyShare line consists of three All-in-One printers in the \$150-300 range. Available exclusively at Best Buy stores across the U.S. in March, the printers will be available for online purchase at www.kodak.com in April. In the meantime, visit Inkisit.com for more information on high ink cartridge costs.



Transcend

Superior performance, Mega capacity and Competitive price coming with SPEED!

SD RAM



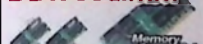
DDR/DDR2



Rambus



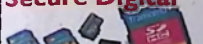
DDR SDRAM



CompactFlash



Secure Digital



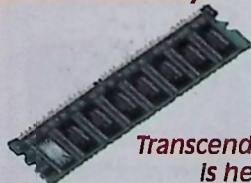
Memory Stick



JetFlash V60



Short on Memory?



Transcend DDR2 800
Is here for you.

RESELLERS:

SLACO COMPUTER
#1116-7318 157th Street
Surrey, B.C.
TEL (604)599-8785
www.slacocomputer.com

Cantec Computer Service
3553 Kingsway
Vancouver, B.C.
TEL (604) 439-9100

Intertech O A Distribution Inc.
4317 Fraser Street
Vancouver, B.C.
TEL (604) 872-7357
www.intertechpc.com

EXPC Technology Inc.
(604)433-1662
#1688-4500 Kingsway
Burnaby, B.C.
www.expc.ca

Distributed by: CanPC Technology Inc. Tel: 604-909-0998 Fax: 604-433-1635 1668-4500 KINGSWAY, BURNABY, BC V5H2A9 www.canpc.com

Shadowrun: Developing the world's first cross-platform shooter

Think your mad keyboard and mouse PC shooter skillz outclass those of lowly console gamers? Shadowrun, the world's first true cross-platform PC/console shooter, will finally let you put your money where your mouth is.

Mainstream gaming is now well into its fourth decade, but the concept of cross-platform gaming—people running the same title on different platforms playing against one another—is still largely unexplored territory, especially when it comes to first-person shooters.

Back in the days of the Dreamcast, there was talk of games like Quake and Unreal offering limited cross-platform functionality with their original PC versions, but it never materialized. Most developers no longer even entertain the idea. But Microsoft-owned FASA Interactive has spent the last four years quietly at work on a game developed from the ground up to facilitate play between PC and Xbox 360 gamers. Dubbed Shadowrun, the game is based in a mystical near future and provides players the ability to use both magic and advanced military weaponry in fast-paced, first-person shooter combat.

The technological problems associated with developing a game that can be played on more than one platform are plentiful. But, as it turns out, the most obvious hurdle - reconciling the fundamentally different ways in which console and PC players interface with games - wasn't all that hard to

overcome. The long held notion that PC players, with their lightning fast keyboard and mouse control configurations, would hold a severe and unfair advantage over console gamers and their thumbstick-driven game pads, didn't hold much truth in Shadowrun's tests.

FASA created a team of testers composed of tournament level players in both the PC and console arenas. They spent months duking it out in controlled environments, and the data collected during these sessions showed console and keyboard players were very evenly matched.

According to John Howard, Shadowrun's lead designer, "If two guys played each other, one on PC another on 360, and the guy on PC won 60 percent of the time, he was just better. If they switched platforms, the guy who won using a keyboard and mouse would win 60 percent of the time playing on a 360 as well."

Howard used to work for Bungie Software, the company behind Halo, one of the most popular console shooters of all time. He was the guy responsible for designing Halo's control scheme—a configuration that has since become the standard among console shooters, including Shadowrun. He believes that the reason why console gamers aren't at a disadvantage in cross-platform gaming is that console gamers have now spent years practicing with Halo's controls. "They pick it up and it just feels right," said Howard.

Still, he noted that each platform does appear to have inherent—albeit minor—advantages. A skilled keyboard and mouse player, for example, has a slight edge in the speed with which they can turn and target an enemy. Someone playing with a game pad, on the other hand, is capable of performing more controlled strafes and keeping the aiming reticle trained on targets for longer periods of time.

But Howard said that the differences basically balance themselves out. Players will naturally migrate to their preferred platform and make



Global ideas Wholesale Priced to the Public!

CD Media

HP CD 52X, 50pcs
HP Lightscribe CD 52X, 25 pcs
HP CD RW 12X, 10pcs
RiData CD 52X, 50pcs
Printable White/Silver CD 52X
Digital Audio CDR

DVD Media:

HP DVD +/- R 16X
HP Lightscribe DVD 16X
Maxell DVD 8X/16X
Pirco DVD 4X
RiData DVD 8X
Taiyo Yuden DVD 8X/16X
Inkjet white/silver DVD-R 8X
Dual layer DVD +/- R
DVD +/- RW

Professional Media

Sony, Fuji, Panasonic, Maxell

Accessories

CD Jewel Case
Colour CD Slim Case
DVD Case:
single multi (2, 3, 4, 6, 10)
Plastic/Paper Sleeve
Cardboard Mailers
Bubble Lined Mailers
CD / DVD Cello Wrap
Full Face CD Labels
Batteries
Duster 10oz/Duplicator
Digital Web Cameras
Disc & Lens Cleaner

NEW!

Epson Compatable Ink
R260/380/580 **\$5.99**

CD Slim Case

Black, 200 pcs / box

15¢

CD Carrybox

Fits 510 or 1000 pcs.
Great for organising,
a gift, or DJ's

HP DVD +/- R
(300 pcs / box)

\$15

\$39

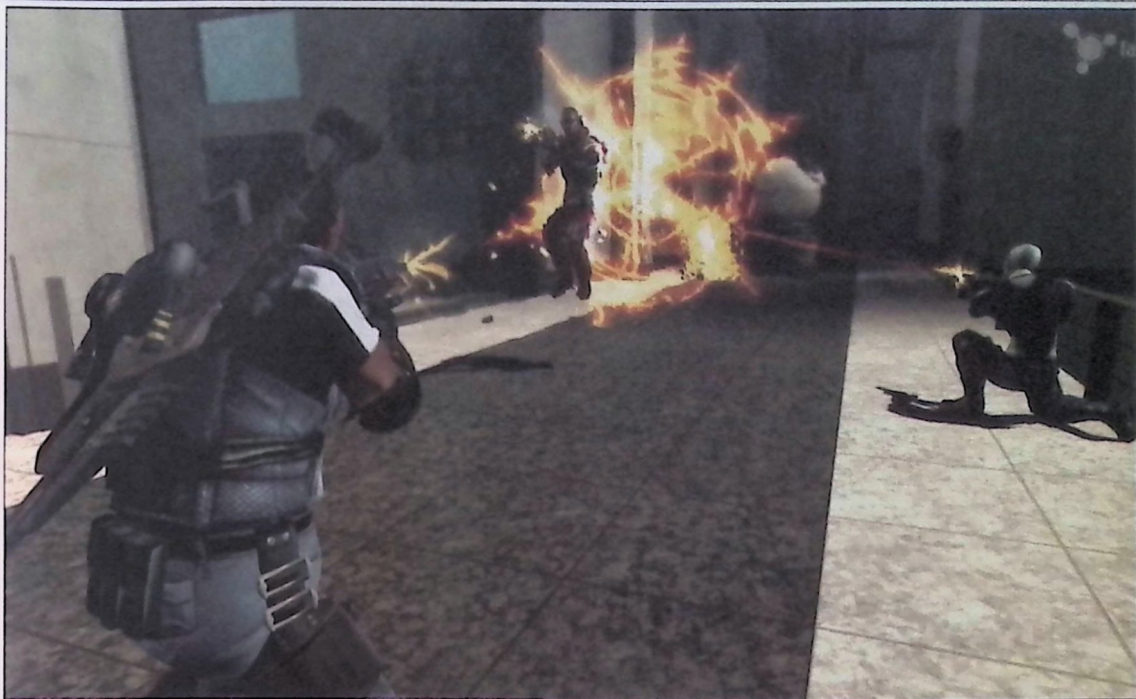
- Duplication / Replication
- Silkscreening / Offset Printing
- Thermal Printing
- Assembling & Packaging
- Tape to DVD Transferring
- Graphic Design

**100 CDR
Duplication
\$99**

Get on our Email list
for monthly promotions!



#120-4011 Viking Way, Richmond, V6V 2K9
Hours: Monday - Friday, 9:00 AM - 5:30 PM
T: 604-303-7371
E: info@globalideas.ca



the most of the advantages intrinsic to it.

The greatest challenge in developing a cross-platform game ended up having less to do with controls and more to do with visuals; they had to make Shadowrun look identical on both platforms. Some disparities, such as the aspect ratio and resolution of the screens the game would be played on, could only be accounted for to a certain degree in development. But more important matters, such as physics, character movements and model detail, had to appear exactly the same on both the PC and the Xbox 360 to ensure that the overall visual experience on one platform was indistinguishable from the other.

Howard and his team licked this problem by developing an engine that performs the same on both platforms, despite fundamental disparities in chip sets, memory systems and other hardware components. Another step they took was to make the minimum requirements for the PC version relatively high (it's a Vista-only title), thereby ensuring that the game would only be run on hardware at least as powerful as an Xbox 360.

But in the end, the "how" of cross-platform game development, while interesting, might not be as important as the "why." Why go to all the trouble to make a cross-platform title?

Some hardcore PC and console players have long craved the opportunity to finally square off against one another so they can prove the superiority of their respective platforms. But Howard finds the whole notion of a "grudge match" between PC and console players a bit boring. His motivation to break the cross-platform barrier is more in line with that of a true gamer: he wants to expand the potential pool of players. "It's about creating the largest community possible," said Howard.

By Chad Sapieha

MEMORYDEPOT.COM

FREE DELIVERY!

ANYWHERE IN CANADA

30 Days satisfaction guaranteed - Lifetime warranty on all Memory Upgrades

2GB SD Card

34.75\$

IS YOUR SYSTEM READY FOR VISTA?

Windows Vista

FingerPrint Secure USB Flash Drive

2GB 58.99\$

4GB 93.99\$

Notebook Memory upgrade

SODIMM PC133

256Mo 59.99\$ 512Mo 119.99\$

DDR SODIMM 333Mhz

512Mo 64.99\$ 1Go 159.99\$

DDR2 SODIMM 533Mhz

512Mo 75.00\$ 1Go 169.99\$

Flash Memory

Secure Digital

CompactFlash

512Mo 25.99\$ 1Go 27.99\$

2Go 89.99\$ 2Go 34.99\$

4Go 145.99\$ 4Go 109.99\$

Need help finding the memory you need? Check our memory configurator.

Boost your MAC!

MacBook Pro

512Mo 81.99\$ 1Go 146.99\$

PowerMAC G5 DDR2

Kit 1Go 186.00\$ Kit 2Go 278\$

Mac Pro

1Go 234.99\$ 2Go 453.00\$

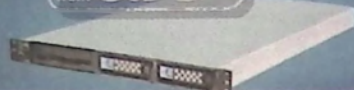
PLEASE ENTER "HUB" ON YOUR PROMOTION CODE TO GET YOUR FREE DELIVERY

1-888-233-8864

HOST with Confidence!

Web Hosting

from **\$6.95** /mo



Dedicated Server

from **\$149** /mo



Server Colocation

from **\$150** /mo





Web Hosting by dollarhost.com


- Linux and Windows Hosting
- Upto **2,000 MB** Web Storage
- Upto **50,000 MB** Data Transfer
- POP / IMAP Email Accounts
- Web-based Email Access
- Email Aliases / Forwarding
- **Email Virus Scanning** by Symantec Carrier Scan Server™
- Multiple FTP accounts
- **MS FrontPage Support**
- **PHP / CGI / ASP / ColdFusion**
- **Database Support**
- E-commerce Ready
- SSL Secure Server
- Website Statistics
- **Toll Free Phone and Email Support**
- **FROM ONLY \$6.95/mo.**

Dedicated Server

Linux Server only **\$149/mo**

- Intel Dual Core 2.8GHz
- **512MB RAM**
- 120GB Hard Drive
- **500 GB* Monthly Data Transfers**
- Fedora Linux Server
- **Ensimg® Pro** for Linux 
- Web-Based Control Panel
- **Host Unlimited Domains**
- Setup Fee: \$149
- Monthly Fee: \$149
- * On 6 months contract

 **Windows Server \$249/mo**

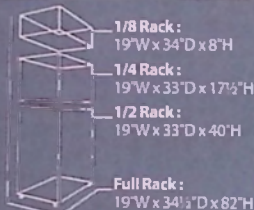
- Intel Dual Core 2.8GHz
- **512MB RAM**
- 120GB Hard Drive
- **500 GB* Monthly Data Transfers**
- **Windows Server 2003 Web Edition**
- **Ensimg® Pro** for Windows 
- Web-Based Control Panel
- **Host Up To 250 Domains**
- Setup Fee: \$249
- Monthly Fee: \$249
- * On 6 months contract

Server Colocation

- Fully Redundant BGP4 Network
- 100Mbps Fast Ethernet Switched Port
- UPS Power
- Diesel Generator
- 24/7 Facility Access
- Online Traffic Reports

Now More Data Transfers!

1/8 Rack	20GB Transfer	\$150/mo
1/8 Rack	200GB Transfer	\$200/mo
1/4 Rack	500GB Transfer	\$450/mo
1/2 Rack	500GB Transfer	\$600/mo
Full Rack	500GB Transfer	\$995/mo
Mbps	Fixed bandwidth	Please Call



New: 10Mbps Internet Access \$1195/mo

- 10 Megabits Per Second full duplex dedicated internet connection at your office
- ~~\$1895/mo~~ **\$1195/mo** introductory special.*
- Static IPs and Unlimited traffic included

Domain Registration From US\$15/yr

- .com, .net, .org, .ca, .biz, .info
- free domain parking
- free "under construction" page.

In2net provides you with fast, reliable web servers, shared or dedicated, professionally configured to perform strong and priced affordably. Our company has helped thousands of Canadian businesses and individuals establish their web presence since 1996.

In2net Performance Dedicated Servers come out-of-box ready to host websites. All hardware, software and bandwidth is included along with powerful graphical user interfaces for non-technical administrators to operate the server. For Hosting Providers, webmasters & individuals who need full control and customization - without the hardware investment costs. Order today and begin hosting tomorrow.

Web Hosting Solutions from DollarHost offers support for many popular applications at affordable prices.

Call in2net Today for More Info. 604-608-6868. www.in2net.com

in2net
network inc.

FOXCONN

www.foxconnchannel.com

The Art of More

- MORE RELIABILITY
- MORE POWER
- MORE PERFORMANCE



P965/AA-8EKRS2H



New Intel® Flagship P965 Extreme High Performance Motherboard

- Supports Core 2 Duo, PCI-E, DDR-800
- High definition audio and more
- 3-Year factory warranty



FV88SMBD2-0NOC



Newest nVidia® 8800 GTS Chipset

- Factory overclocked right out of box
- Features 575 / 1600MHz Core Clock / Memory
- Bundles US\$170 worth of gaming hardware and application software
- HDTV support
- 3-Year factory warranty

Recent Awards (see site for details)



Where To Buy:



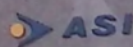
www.newegg.com



www.bestbuy.ca



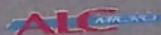
www.wapac.net



www.asipartner.com



www.minimicros.com



www.alcmicro.com
(Toronto)

hub:ce

cool gadgets, tips and news
learn how you can get your home connected

next issue : march 15



Z84JP

The Best Multimedia Whitebook Platform - Inside and Out

Dedicated graphics engines (DGE) for games and videos

HDMI support for compelling HD experiences

Subwoofer delivers stunning acoustics

High gloss piano black finish

User-friendly Instant Key Design

Dolby Home Theater Support

2.0 Megapixel Camera

Stunning Acoustics



The Z84JP is the latest whitebook product in the ASmobile family providing whitebook resellers with the best multimedia entertainment solution for mobile professionals. As with all its products, ASmobile provides the necessary parts and support for a successful whitebook business. More information about ASmobile Whitebooks at: ca.asus.com/hub2

NCIX
1-888-NCIX-888
www.ncix.com

PC Cyber
1-613-224-9995
www.pccyber.com

Infonoc
1-888-418-9338
www.infonoc.com

Anitec
1-888-264-8329
www.anitec.ca

PC Village
1-905-889-5488
www.pcvonline.com

Milestone Computer
1-905-307-7738
www.MilestonePC.com

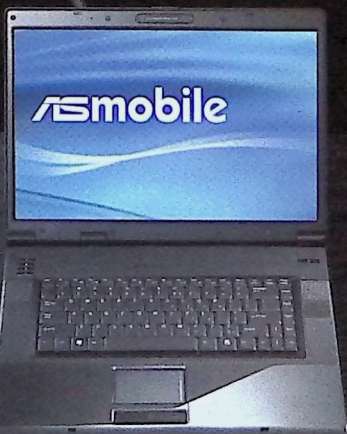
Canada Computers
1-416-733-4481
www.canadacomputers.com

Pacific Notebooks
1-905-305-6833
www.pacificnotebooks.com

MicroBytes
1-877-MICROBYTES
www.microbytes.com

ASmobile

© 2011 ASUS Computer International. All Rights Reserved. ASUS is a registered trademark of ASUS Computer International. NVIDIA and GeForce are registered trademarks of NVIDIA Corporation. Intel, Centrino and Intel Core are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries. Microsoft and Windows are registered trademarks of Microsoft Corporation.



- Supports Intel® Centrino Duo Mobile Technology
- Intel® Core™2 Duo Processor
- Intel® 945GM+ICH7M Chipset
- 17" WXGA+ Widescreen (1680x1050)
- NVIDIA® GeForce® Go 7600 512 MB
- Up to 4 GB DDR2 RAM
- DVD-RW Super-multi
- eSATA port, HDMI Port

What's *your* name on the web?

Get your website started today with a domain name from Netfirms®. Canada's best price at **only \$9⁹⁵ /yr.**

This is Sam

He owns:

www.ChaseTheCats.com
www.RedFireHydrant.ca

This is Kim

She owns:

www.RunningGirls.ca
www.RealEstateKim.net
www.KimmysBlog.com
www.PotteryForSale.biz

Netfirms is a trademark of Netfirms Inc. All other trademarks are property of their respective owners.
©2007 Netfirms Inc. All Rights Reserved. For more information visit www.netfirms.ca

Hurry, get yours before it's gone! Visit:

www.MakeAName.ca

Or call 1-866-761-6399



netfirms®

www.netfirms.ca